RUSS OLSON VOLUME 21

DULUTH-SUPERIOR TRACTION CO.

TCRT-BUILT EQUIPMENT

Description

TCRT-built Electric Cars, Duluth St. Ry-built Service Cars, Car-building History, Building-Rebuilding-Disposition Dates, Trucks-Motors-Controllers, Original Cost per Car

Sub-divisions Within This Volume

- Car-building History
- Construction and Disposition Dates
- Trucks, Motors, and Controllers
- Car-building Costs

CARBUILDING HISTORY

Contents of the Divider’s Pocket

Mechanical Dep't. PLATE I Sept. , 1918

ROLLING STOCK
OF THE
DULUTH STREET RAILWAY

CAR N°	TYPE	BUILDER	IN SERVICE	TRUCKS No.		MOTORS No.		REMARKS same as #5 #14 $100	CA N°
● 1		*	7-6-1883					These were old horse cars of which no records have been kept Sold to MPSR 12/18/91 for $200	
● 2		*							
● 3		*							
● 4	Pass.		Apr 1886	1		2	WH #3	PART OF ROLLING STOCK REC'D FROM INTERSTATE TRACTION Co Sold for Scrap to West End Scrap & Metal Co. 8-31, 19	
● 5								Sold to MPSR 5-11-92 for $90	
● 6									
● 7								same as #5	
● 8									
● 9									
● 10								same as #5	1
● 1									
● 2									
● 3								same as #5	
● 4								Sold to MPSR 8-16-90 for $400	
● 5									
● 6			May 1888						
● 7									
● 8									
● 9	PASS.	LACLEDE	10-1890	1	McGUIRE	2	T.H. F30	SOLD TO GRAND FORKS TRANSIT Co. off before ~~1916~~ 1908	
● 20	"	"	"	"	"	"	"	" " S. J. JONES	2
● 1	"	"	"	"	"	"	"	GIVEN TO D. C. MOORE	
● 2	"	"	"	"	"	"	"	SOLD TO T. J. O-BRYAN	
● 3	"	"	"	"	"	"	"	BURNED AT INCLINE	
● 4	"	"	"	"	"	"	"	SOLD TO J. A. FERGUSON	
● 5	"	"	"	"	"	"	"	" " DULUTH BELT LINE R'y.	
● 6	"	"	"	"	"	"	"	" " T. M. MADDEN 10-2-07	
● 7	"	"	"	"	"	"	"	" " "	
● 8	"	"	"	"	"	"	"	" " DULUTH BELT LINE R'Y.	
● 9	"	"	"	"	"	"	SRG30	" " W. E. McEWEN Used on Highland	
● 30	"	"	"	"	"	"	F30	CAR BODY IN CANAL 9-17-93 TRUCK & MOTORS PLACED UNDER CAR #92	3
● 1	"	"	3-1891	"	BEMIS	"	SRG30	BURNED MOTORS PLACED UNDER CAR 88	
● 2	"	"	"	"	"	"	"	DESTROYED before '01	
● 3	"	"	"	"	"	"	"	SOLD TO. ST. CLOUD ST. R'Y Co. 4/7/03	
● 4	"	"	"	"	"	"	"	BURNED ~~AT~~ WOODLAND 11-16-94 barn fire	
● 5	"	"	"	"	"	"	"	DESTROYED	
● 6	"	"	"	"	"	"	F30	SOLD TO ST CLOUD ST. R'Y. Co. 4/7/03	
● 7	"	"	"	"	"	"	SRG30	DESTROYED	
● 8	"	"	7- "	"	McGUIRE	"	"	SOLD TO W. E. McEWEN	
● 9	"	"	"	"	"	"	"	" " DULUTH BELT LINE R'Y 5-7-15	
● 40	"	"	"	"	"	"	"	" " OLAF PETERSON 1-25-13	4
● 1	"	"	"	"	"	"	"	" " DULUTH BELT LINE R'Y. 5-7-15	
● 2	PRIVATE	"	"	"	"	"	" *	"ST. LOUIS" BODY TOGETHER WITH TRUCK & MOTORS FROM #50 SOLD TO DULUTH IRON & METAL Co. 5-15-18; TRUCK & MOTORS PLACED UNDER FLAT 8/145	
● 3	PASS.	"	"	"	"	"	"	BURNED AT HIGHLAND 1-29-11	
● 4	"	NOR. CAR Co	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co.	
● 5	"	"	"	"	"	"	"	" " " " "	
● 6	"	"	"	"	"	"	"	SOLD TO ABERDEEN R'Y. Co. ~~about 1910~~ before 1908.	
● 7	"	LACLEDE	5-1892	"	"	"	"	SCRAPED 8-23 MOTORS & CONTROLLER STORED F '33 TRUCK & FLOOR USED FOR BLDG. ASH CAR TRAILER	
● 8	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 7-23-12	
● 9	"	"	"	"	"	"	"	SCRAPPED 7-1917. TRUCK & MOTORS UNDER FLAT 7/144	
● 50	"	"	"	"	"	"	"	" " " " " " " CAR #42	5
● 1	" -Tower	"	MOTORS &	CONTROLLER	STORED 8-23			CONVERTED INTO TOWER CAR 1892 SCRAPED 8-23 TRUCK USED-ASH CAR TRAILER R33	
2	"	"	"	"	"	"	"	Remodeled to Pay Enter Car 6/22, 19 - Double End WEST 4TH ST. R&S 31-32	
● 3	"	"	"	"	"	"	"	SOLD TO W.E. SCRAP IRON & METAL CO. 11-16-23 S 11-23	
● 4	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 7-23-12	
● 5	"	"	"	"	"	"	"	" " " " " " " "	
● 6	"	"	"	"	"	"	"	" " " " " " " "	
7	"	"	"	"	"	"	"	REMODELED TO PAY-ENTER CAR 5/16, 19 Double End W. 4th St. R&S 31-32	
● 8	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 8-29-12	
● 9	"	"	"	"	"	"	"	SOLD TO W.E. SCRAP IRON & METAL CO. 11-16-23	
● 60	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 5-11-12	6

SE

* From St. Paul City Ry.

* Rebuilt into "St. Louis" 11/20/96

47 & 51 ASH CAR TRAILERS

R = retired

● = DISPOSED OF

ROLLING STOCK
OF THE
DULUTH STREET RAILWAY

CAR No	TYPE	BUILDER	IN SERVICE	TRUCKS No.		MOTORS No.		REMARKS
● 61	PASS.	LACLEDE	5-1892	1	McGUIRE	2	S.RG30	SCRAPPED 7-1917 TRUCKS & MOTORS PLACED UNDER FLAT 6/143
● 2	" -SUPPLY	"	"	"	"	"	"	CONVERTED INTO SUPPLY CAR 1915 SOLD TO W.E. SCRAP IRON & METAL Co 11-16-23
● 3	INCLINE	T.C.R.T. Co.	1901	"	T.C.R.T. Co.	4	GE 67	SOLD TO A.G. MACAULAY - MOTORS PLACED UNDER FLAT #1/64
4	FLAT #1	D.S.R. Co.	"	2	D.S.R. Co.	"	"	Sold 1-36
5	" 2	"	1902	"	"	"	GE 70	Sold '38
6	PLOW #2	"	1903	"	BRILL	"	GE 67	TRUCKS & MOTORS EXCHANGED WITH CAR 222, 12-1917 Ret '39
7	TOWER #1	"	1904	"	BEMIS	"	"	Scrapped 4-20-33
● 8	PASS.	LA CLEDE	10 1893	1	BALTIMORE	2	W.H. #3	SOLD TO DULUTH MACHINERY Co. 8-29-1912
● 9	" 32'	"	"	"	McGUIRE			SOLD TO GRANITE CITY RY. Co. 6-11-1910
● 70	"	"	"	"	"			" " DULUTH MACHINERY CO. 8-29-1912
● 1	" 32'	"	"	"	BALTIMORE	2	W.H. #3	" " GRANITE CITY R'Y. CO. 6-11-1910
● 2	"	"	"	"	McGUIRE	"	S.RG30	" " DULUTH MACHINERY CO. 7-23-1912
● 3	"	"	"	"	"	"	W.H. #3	" " W.E. SCRAP IRON & METAL Co 11-16-23
● 4	"	"	"	"	BALTIMORE	"	"	BURNED. DESTROYED 9-16-1910
● 5	"	"	"	"	"	"	"	SOLD TO W.E. SCRAP IRON & METAL Co. 11-16-23
● 6	" 32'	"	"	"	McGUIRE	"	"	SOLD TO GRANITE CITY R'Y. Co. 6-11-1910
● 7	" 32'	"	"	"	BALTIMORE	"	"	" " " " " " " " "
● 8	"	"	"	"	McGUIRE	"	"	GIVEN TO MRS. FLORENCE LEE 9-11-1911
● 9	"	"	"	"	"	"	"	SCRAPED 8-23 MOTORS & CONTROLLER STORED R33 TRUCK & FLOOR USED FOR BLDG. ASH CAR TRAILER
● 80	"	"	"	"	"	"	SRG30	WRECKED, ~~BURNED~~ 7-9-1914 21st St. viaduct
● 1	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY CO. 7-18-1912
● 2	"	"	"	"	"	"	"	BODY SOLD TO A. PAQUIN W. DUL. $50 11-16-23 TRUCK MOTORS & CONTROLLER SOLD TO W.E. SCRAP & METAL Co. 11/16-23
● 3	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 7-18-1912
● 4	"	"	"	"	"	"	"	" " " " " " " "
● 5	"	"	"	"	"	"	"	SCRAPPED 4, 1917.- TRUCK & MOTORS PLACED UNDER FLAT #5/142
● 6	"	"	"	"	"	"	"	SOLD TO DULUTH MACHINERY Co. 8-29-1912
● 7	"	"	"	"	"	"	"	WRECKED ON 3rd ST. DESTROYED 12-1909
8	SUPPLY 1	D.S.R. Co.	1895	"	"	"	"	Motors from 51 Closed body DE 205 Ret '35
● 9	PASS.	BROWNELL	1891	"	BROWNELL	"		~~DESTROYED AT~~ "WOODLAND"
● 90	"	"	"	"	"	"		"DULUTH"
● 1	" OPEN	"	4- "	"	"	"		SOLD TO INTERSTATE TRACTION CO. about 1907
● 2	" "	"	"	"	McGUIRE	"	F.30	" " " " "
● 3	" "	"	"	"	BROWNELL	"		" " " " "
● 4	" "	"	"	"	"	"		" " " " "
● 5	" "	NORTHERN	9-1892	2	BEMIS	"	SRG30	SOLD FOR SCRAP - TRUCKS & MOTORS PLACED UNDER CAR 67
6	FLAT #3	D.S.R. Co.	1907	2	D.S.R. Co.	4	GE 70	WITH 2 ONE-TON ELECTRIC HOISTS Sold '40
7	" #4	"	1912	"	"	"	"	Sold '39
8								
● 9	PASS. 16'	PULLMAN		1	PULLMAN	(No Motors When Roads Were Consolidated)		GIVEN TO E. HALGREN
● 100	PRIVATE 16'	"		"				" " W.D. DWYER
● 1	PASS. 23'	STEPHENSON		"				SOLD TO NORMAL SCHOOL (WAITING STATION)
● 2	" " 23'	"		"				" " GRAND FORKS TRACTION Co.
● 3	" 23' 6"	PULLMAN		"				GIVEN TO M. HANSON
● 4	" 23' 6"	"		"				SOLD TO LAKESIDE CLUB (WAITING STATION)
● 5	" 25' 6"	"		"				" " ST. CLOUD ST. R'Y. CO 11-7-03
● 6	" 21'	"		"				" " T. GIBSON
● 7	" 21'	"		"				" " LAKESIDE CLUB
● 8	" 25' 7"	"		"				" " ST. CLOUD ST. R'Y. 4-7-03
● 9	" 25' 7"	"		"				" " " " " " 4-7-03
● 110	" 26' 9"	NORTHERN T.C.R.T.	'92	"	McGUIRE	2	WP30	" " INTERSTATE TRACTION CO.
● 1	TOWER	"	No Record	"	"	"	"	WRECKED & DESTROYED
● 2	"	"		"	"	"	"	Became line car in 1910 SOLD TO DULUTH MACHINERY CO. 8-29-1912
● 3	PASS.	"		"	"	"	"	" " ABERDEEN R'Y. CO. 10-1-1910
● 4	"	"		"	"	"	"	BURNED- DESTROYED 8-19-1910
● 5	"	"		"	"	"	"	SOLD TO ABERDEEN R'Y. CO. 9-1-1910
● 6	"	"		"	"	"	"	" " " " " 5-25-1911
● 7	"	"		"	"	"	"	" " INTERSTATE TRACTION CO.
● 8	"	"		"	"	"	"	" " OTTO ERICKSON
● 9	"	"		"	"	"	"	5 " ABERDEEN R'Y. CO. 10-1-1910
● 120	" 26' 3"	ST. LOUIS	'93	"	"	"	"	" " " " " " " "

DE = 118
79 = ASH CAR TRAILER

R's retired

136

● = DISPOSED OF

ROLLING STOCK
OF THE
DULUTH STREET RAILWAY

CAR Nº	TYPE	BUILDER	IN SERVICE	TRUCKS No.	TRUCKS	MOTORS No.	MOTORS	REMARKS	CAR Nº
● 121	26'3" PASS.	ST. LOUIS	NO RECORD	1	McGUIRE	2	W.P.30	SOLD TO EDW. SWENSON 10-5-1910	12
● 2	"	"		"	"	"	"	" " INTERSTATE TRACTION Co. 10-5-1910	
● 3	"	"		"	"	"	"	" " EDW SWENSON 10-5-1910	
● 4	"	"		"	"	"	"	BURNED	
● 5	29'3" "	LA CLEDE	193-94	"	"	"	"	SOLD TO ABERDEEN R'Y. Co. 10-1-1910	
● 6	"	"		"	"	"	"	" " " " " " " "	
● 7	"	"		"	"	"	"	" " " " " 5-25-1911	
● 8	"	"		"	"	"	"	WRECKED-DESTROYED	
● 9	"	"		"	"	"	"	SOLD TO ABEDEEN R'Y. Co. 10-1-1910	
● 130	"	"		"	"	"	"	" " DULUTH MACHINERY Co. 8-29-1912	13
1	SUPPLY 33'2"	AM. CAR Co.	'94	"	"	"	"	TURNED INTO SUPPLY CAR 9-10-20 Scrapped 6/31	
● 2	"	"		"	"	"	"	SOLD TO DULUTH MACHINERY Co. 6-25-1912	
● 3	"	"		"	"	"	"	" " " " " " " "	
● 4	"	"		"	"	"	"	" " " " " 8-29- "	
● 5	"	"		"	"	"	"	" " " " " " " "	
● 6	"	"		"	"	"	"	WRECKED - BURNED 5-1-1913	
● 7	SNOW SWPR	TCWT H Elect	1-8-91 ~~6-11-19-90~~	"	"	4	W.P. 50	DESTROYED	
● 8	"	"	~~" " 17-90~~	"	"	"	"	"	
9	SNOW P. #1	D.S.R. Co	1902	2	BRILL	"	GE.70	TRUCKS & MOTORS EXCHANGED WITH CAR 241, 12-1917 Ret '39	
140	" " #3	"	1906	"	"	"	" "	" " " " " 248 " " Ret '39	14
1	WRECKER #1	T.C.R.T. Co.	1911	"	D.S.R. Co.	"	" "	With 8-ton electric crane Ret '40	
2	FLAT #5	D.S.R. Co.	4- 1917	1	McGUIRE	2	SRG 30	TRUCK & MOTORS TAKEN FROM CAR 85 Sold '35	
3	" #6	"	7- "	"	"	"	" "	" " " " " 61 w/swivel crane & chain block Sold '38	
4	" #7	"	" "	"	"	"	" "	" " " " " 49 Car used for Coal Sold '39	
5	" #8	"	" "	"	"	"	" "	" " " " " 42 Car used for Ashes Sold '39	
6	SNOW P. #4	T.C.R.T. Co.	11- "	2	T.C.R.T. Co	4	GE 73	TRUCKS & MOTORS GE 73 SHIPPED TO T.C.R.T. Co. 5-21-18, RETURNED 11-18-18 Property of U.S. Fleet Corporation up to 1921 Cost $10,000 Ret '3	
12 7	PASS. PLOW	LE CLEDE	9-1- "	1	McGUIRE	2	WP 30	CONVERTED INTO SNOW P. BY PARK P. TRACTION Co. Scrapped 6/31	
13 8	TOWER 3	"	" "	"	"	"	" "	" 27'4" " TOWER C. " " " " " Scrapped 4/30	
9									
150									15
1	PASS.	T.C.R.T. Co.	6- 1901	2	27 BRILL 01	4	GE67	Originally hand brakes. Air brakes added Mar-May 1903 Converted to dbl gate	
2	"	"	" "	"	"	"	" "		
3	"	"	" "	"	"	"	" "		
4	"	"	" "	"	"	"	" "		
5	"	"	" "	"	"	"	" "		
6	"	"	" "	"	"	"	" "		
7	"	"	" "	"	"	"	" "		
8	"	"	" "	"	"	"	" "		
9	"	"	" "	"	"	"	" "		
160	"	"	" "	"	"	"	" "		16
1	"	"	" "	"	"	"	" "		
2	"	"	" "	"	"	"	" "		
3	"	" 992	4- 1904	"	" 04	"	" 70	Rebuilt to double-end and placed in Crosley Ave shuttle service 10/8/34	
4	"	"	" "	"	"	"	" "	TRUCKS & MOTORS RECEIVED FROM CAR 248 10-26-20	
5	"	"	" "	"	"	"	" "		
6	"	"	" "	"	"	"	" "		
7	"	"	" "	"	"	"	" "		
8	"	"	" "	"	"	"	" "		
9	"	"	" "	"	"	"	" "	Wrecked by GN train at 21st St crossing 1/7/27	
170	"	"	" "	"	"	"	" "		17
1	"	"	" "	"	"	"	" "		
2	"	"	" "	"	"	"	" "		
3	"	"	" "	"	"	"	" "		
4	"	"	" "	"	"	"	" "		
5	"	"	" "	"	"	"	" "		
6	"	"	" "	"	"	"	" "		
7	"	" 1037	" "	"	"	"	" "		
8	"	" 1043	3- 1905	"	BALDWIN #1	"	" "		
9	"	" 1108	" "	"	"	"	" "		
180	"	" 1109	7- 1906	"	"	"	" "		18

DE = 124, 130-136, 137-140
SE = 146

● = DISPOSED OF

Mechanical Dept. PLATE IV Sept., ~~1918~~ 1924

ROLLING STOCK
OF THE
DULUTH STREET RAILWAY

CAR Nº	TYPE	BUILDER	IN SERVICE		TRUCKS		MOTORS			REMARKS	CAR Nº
	06				NO.		NO.				
181	PASS.	T.C.R.T.Co. 1110	7-	1906	2	BALDWIN #1	4	GE.	70		18
2	〃	〃 1111	〃	〃	〃	〃	〃	〃	〃		
3	〃	〃	6-	1907	〃	~~TCRT #5~~	〃	〃	〃	First steel underframe	
4	〃	〃	〃	〃	〃	〃	〃	〃	〃		
5	〃	〃	〃	〃	〃	〃	〃	〃	〃		
6	〃	〃	〃	〃	〃	〃	〃	〃	〃		
7	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8	〃	〃	〃	〃	〃	〃	〃	〃	〃		
9	〃	〃	7-	〃	〃	〃	〃	〃	〃	TURNSTILE INSTALLED FOR PAY-ENTER SERVICE 7-22-20	
190	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 〃 〃 〃 〃	19
1	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 〃 Turnstiles REMOVED 8-29-23 〃 〃	
2	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 〃 〃 〃	
3	〃	〃	8	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 〃 〃 〃 〃	
4	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 Turnstile's Removed 9-20-23	
5	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 〃 〃 〃 〃	
6	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃 〃 〃 〃 Removed 8-29-23	
7	〃	〃	〃	〃	〃	〃	〃	〃	〃	TRUCKS & MOTORS EXCHANGED WITH CAR 279-10-26-20	
8	〃	〃	6	1908	〃	TCRT #5	〃	〃	213		
9	〃	〃	〃	〃	〃	〃	〃	〃	〃		
200	〃	〃	〃	〃	〃	〃	〃	〃	〃		20
1	〃	〃	〃	〃	〃	〃	〃	〃	〃		
2	〃	〃	〃	〃	〃	〃	〃	〃	〃		
3	〃	〃	〃	〃	〃	〃	〃	〃	〃		
4	〃	〃	7	1909	〃	〃	〃	〃	〃	First triple gate	
5	〃	〃	〃	〃	〃	〃	〃	〃	〃		
6	〃	〃	〃	〃	〃	〃	〃	〃	〃		
7	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8	〃	〃	〃	〃	〃	〃	〃	〃	〃		
9	〃	〃	〃	〃	〃	〃	〃	〃	〃		
210	〃	〃	〃	〃	〃	〃	〃	〃	〃		21
1	〃	〃	〃	〃	〃	〃	〃	〃	〃		
2	〃	〃	〃	〃	〃	〃	〃	〃	〃		
3	〃	〃	〃	〃	〃	〃	〃	〃	〃		
4	〃	〃	〃	〃	〃	〃	〃	〃	〃		
5	〃	〃	6-	1910	〃	〃 #6	〃	〃	〃		
6	〃	〃	〃	〃	〃	〃	〃	〃	〃		
7	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8	〃	〃	〃	〃	〃	〃	〃	〃	〃		
9	〃	〃	〃	〃	〃	〃	〃	〃	〃		
220	〃	〃	〃	1911	1	T.C.R.T.Co.	2	GE	210	INCLINE	22
1	〃	〃	〃	〃	〃	〃				〃	
2	〃	〃	〃	〃	2	#9 〃 #6	4	〃	216	TRUCKS & MOTORS EXCHANGED WITH S. PLOW 3/66 12-1917	
3	〃	〃	〃	〃	〃	〃	〃	〃	〃		
4	〃	〃	〃	〃	〃	〃	〃	〃	〃		
5	〃	〃	〃	〃	〃	〃	〃	〃	〃		
6	〃	〃	〃	〃	〃	〃	〃	〃	〃		
7	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8	〃	〃	〃	〃	〃	〃	〃	〃	〃		
9	〃	〃	〃	〃	〃	〃	〃	〃	〃		
230	〃	〃	〃	〃	〃	〃	〃	〃	〃		23
1	〃	〃	〃	〃	〃	〃	〃	〃	〃		
2	〃	〃	7	〃	〃	〃	〃	〃	〃		
3	〃	〃	〃	〃	〃	〃 #9	〃	〃	〃		
4	〃	〃	〃	〃	〃	〃	〃	〃	〃		
5	〃	〃	〃	〃	〃	〃 #9	〃	〃	〃		
6	〃	〃	〃	〃	〃	〃	〃	〃	〃		
7	〃	〃	〃	〃	〃	〃	〃	〃	〃		
8	〃	〃 1482	〃	〃	〃	〃	〃	〃	〃		
9	〃	〃 1483	〃	〃	〃	〃	〃	〃	〃		
240	〃	〃 1484	〃	〃	〃	〃	〃	〃	〃		24

Mechanical Dep't. PLATE V Sept. ~~1918~~ 1924

ROLLING STOCK
OF THE
DULUTH STREET RAILWAY

CAR Nº	TYPE	BUILDER	IN SERVICE	TRUCKS No.	TRUCKS	MOTORS No.	MOTORS	REMARKS
241	PASS.	1485 T.C.R.T.Co.	7-1911	2	T.C.R.T.Co	4	GE216	TRUCKS & MOTORS EXCHANGED WITH S.PLOW # 1/139, 12-1917
2	"	"	6 1912	"	" #8	"	" "	
3	"	"	" "	"	"	"	" "	
4	"	"	" "	"	"	"	" "	
5	"	"	8 "	"	"	"	" "	
6	"	"	" "	"	"	"	" "	
7	"	"	" "	"	"	"	" "	
8	"	"	" "	"	"	"	" "	TRUCKS & MOTORS RECEIVED FROM CAR #284 10-26-20 last car operated
9	"	"	" "	"	"	"	" "	with sliding motormans cab door
250	"	"	" "	"	"	"	" "	
1	"	"	" "	"	"	"	" "	
2	"	" 1564	10 "	"	"	"	" "	
3	"	" 1565	" "	"	"	"	" "	
4	"	" 1566	" "	"	"	"	" "	
5	"	" 868	1 1913	"	"	"	" 67	Short (37'7") cars for Highland Built 1901
6	"	" 869	" "	"	"	"	" "	" " " "
7	"	"	10 1914	"	" #9	"	" 200	
8	"	"	" "	"	"	"	" "	
9	"	"	" "	"	"	"	" "	
260	"	"	" "	"	"	"	" "	
1	"	"	" "	"	"	"	" "	
2	"	"	" "	"	"	"	" "	TURNSTILE INSTALLED FOR PAY-ENTER SERVICE 5-26-20 Removed 9-20-23
3	"	" 1789	5 1916	"	" #8	"	" 213	"
● 4	"	" 1790	" "	"	"	"	" 216	WRECKED ON HILL AVE. & 13 St. SUP. WIS 9-21-17 C.St.P.M. & O.RY. CROSSING
5	"	" 1791	" "	"	"	"	" "	
6	"	" 1792	" "	"	"	"	" 70	
7	"	" 1724	8 "	"	" #9	"	" 200	
8	"	" 1719	" "	"	"	"	" "	FRONT EXIT 11-23 Sold to DM&IRR
9	"	" 1716	" "	"	"	"	" "	" " " "
270	"	" 1722	" "	"	"	"	" "	" " " "
1	"	"	6-1917	"	"	"	" "	" " 10 "
2	"	"	" "	"	"	"	" "	" " 11 "
3	"	"	5 "	"	"	"	" "	" " 10 "
4	"	"	" "	"	"	"	" "	" " " "
5	"	"	6 "	"	"	"	" "	
6	"	"	" "	"	"	"	" "	" " " "
7	"	"	" "	"	"	"	" "	" " 11 "
8	"	"	" "	"	"	"	" "	" " " "
9	"	" 1672	12-24-"	"	BALDWIN #9	"	" 216	LEASED FROM T.C.R.T.Co. 12-1917 RETURNED WITH BALDWIN TRUCKS & GE 70 MOTORS TAKEN FROM CAR 197
● 280	"	" 988	" " "	"	"	"	" 70	" " " " " RETURNED 10-29-20
● 1	"	" 989	" " "	"	"	"	" "	" " " " " " " " "
● 2	"	" 990	" " "	"	"	"	" "	" " " " " " " " "
● 3	"	" 991	" " "	"	"	"	" "	" " " " " " " " "
● 4	"	" 1673	" " "	"	"	"	" 216	" " " " " RETURNED WITH BALDWIN TRUCKS & G.E.70 MOTORS TAKEN FROM CAR 164 10-29-20
5	"	ST.LOUIS 6-13-05	9 1 "	"	ST.LOUIS	2	" 67	PARK POINT EQUIPMENT MOTORS PLACED UNDER #286-11-1917
6	"	"	" " "	"	"	2	" "	" " " Originally named Outlook & Aerial "
7	"	DANVILLE 6-8-11	" " "	"	BRILL 27	2	" "	" " "
8	"	"	" " "	"	"	"	" "	" " "
9	"	1202 T.C.R.T.Co.	11-20-1918	"	T.C.R.T.Co. #9	4	" 200	PROPERTY OF U.S. FLEET
290	"	" 1201	" " "	"	"	"	" "	" " " "
1	"	" 1212	" " "	"	"	"	" "	" " " "
2	"	" 1231	" " "	"	"	"	" "	" " " "
3	"	" 1232	" " "	"	"	"	" "	" " " "
4	"	" 1234	" " "	"	"	"	" "	" " " "
5	"	Amer.Car Co	10-1-19	1	BRILL 27 M.I.	2	" 258C	SINGLE END
6	"	" " "	" " "	"	"	"	" "	" "
7	"	" " "	" " "	"	"	"	" "	" "
8	"	" " "	" " "	"	" 76	"	" "	DOUBLE "
9	"	" " "	" " "	"	"	"	" "	" "
300	"	" " "	" " "	"	"	"	" "	" "
	15' 3"	Bemis	5-25-19	6	9 T.C.R.T.Co	12	GE.200	EXTRA TRUCKS AND MOTORS Recd 5/19,19
			1-25-21			8	" 70	" "
01-305 301-305	"	TCRT	2-19-25	2	Smith #12	+	GE258K	

Left margin on Original:

FIRST			289
MOTORS GE70	TRUCKS BALDWIN	CONTROLLER K28B	290
			291
EXCHANGED 7-1919			292
GE200	TCRT	K43F2	293
			294

● = DISPOSED OF   R&S = Retired & Sold

1363

CARBUILDING HISTORY

AVERY® PV119ED

EQUIPMENT

DULUTH STREET RAILWAY

PASSENGER EQUIPMENT BUILT BY THE TWIN CITY RAPID TRANSIT COMPANY

In 1899 DSR was thinking about obtaining more cars by constructing double-truck cars in its West End shops. DSR would build the carbodies but trucks, motors and controllers would be purchased. Unfortunately DSR was in receivership and financially unable to proceed with these plans. After reorganization it was announced August 27th, 1900, that much needed and desired cars would be procured immediately from the Twin City Rapid Transit Co., being constructed in their shops.

12 cars, 151-162, 31st St. Shops, August-October 1900. TCRT Clas B-3. Weight 39,680 lbs. These cars were the subject of the August 27th announcement. The first car arrived in Duluth January 3, 1901. Loops and wyes had to be built as the cars were single-end operated, approach tracks at the carhouse rebuilt for clearance purposes, bridge and track structures upgraded to sustain the greater weight. The first trial run was not made until May 24, 1901. Regular operation began June 2nd on the "Interstate" line and October 31st on the "Lakeside" line. During the spring 1903 all 12 cars were equipped with airbrakes and whistles, increasing the weight to 44,040 lbs. In addition 151-156 were refitted with rear double gates and steps making them identical to TCRT Class B-5 cars.

1 car, 63, 31st St. Shops, October-November 1901. Incline Railway car. TCRT had numbered the car 163, but DSR later changed it to 63. The car was 22' 2 7/8" long, 8'4" wide and weighed complete 28,000 lbs. with one Peckham 7B truck, 4 G.E. 67 motors and K-6 controller. A second Peckham 7B truck was equipped with a ten-ton metal casting for use as the counterweight. The carbody and both trucks were unloaded in Duluth November 26, 1901.

15 cars, 163-177, 31st St. Shops, April-June 1904. TCRT Class D-7. Weight 49,200 lbs. Interior woodwork finish was cherry rather than maple as on cars 151-162. This order of cars was placed on the "West Duluth-East End" line.

1 car, 178, 31st St. Shops, February 1905. TCRT Class E-4. Weight 46,700 lbs. Built as TCRT 1043 and completed 2-13-1905, it was sold to DSR 2-23-1905. It was placed in operation March 16th in Hunter's Park shortline service on the "Woodland" line.

4 cars, 179-182, 31st St. Shops, June 1905. TCRT Class E-4. Weight 47,300 lbs. The cars were built as TCRT 1108-1111. 1111 was sold to DSR 8-24-1905 and 1108-1110 were sold to DSR 6-16-1906.

15 cars, 183-197, 31st St. Shops, September-November 1906. TCRT Class G-6. Weight 51,520 lbs. Delivered in the spring 1907 all were placed in service during June thru August 1907 on the "E. 4th St." and "Lake Ave." lines.

6 cars, 198-203, Snelling Shops, March-May 1908. TCRT Class I-1. Weight 47,800 lbs.

11 cars, 204-214, Snelling Shops, June 1909. TCRT Class J-2. Weight 46,800 lbs. Arrival of these cars in July 1909 brought the total double-truck cars to 64, sufficient to furnish base service on all Duluth lines except the "Piedmont & W. 4th St." line (which had too little traffic to warrant large cars) and the "Interstate" line.

5 cars, 215-219, Snelling Shops, April-July 1910. TCRT Class K-8. Weight 46,200 lbs.

2 cars, 220-221, Snelling Shops, March 15, 1911. Incline Railway cars.
Each car was 24' 1 3/4" long overall (22'7" body), 10' 10¼" wide, and weighed 30,000 lbs. (22,000 lbs. per DSR records). The Twin City Special 10'0" gauge truck had a 9'0" wheelbase, 34" diameter wheels, and was fitted with Christensen air brakes. Seating capacity was 25 persons.

16 cars, 222-237, Snelling Shops, May-June 1911. TCRT Class K-8. Weight 46,200 lbs.

4 cars, 238-241, Snelling Shops, February 1911. TCRT Class K-8. Weight 46,200 lbs.
Built as TCRT 1482-1485 they were sold to DSR June 28, 1911.

10 cars, 242-251, Snelling Shops, May-August 1912. TCRT Class L-8. Weight 43,700 lbs.

3 cars, 252-254, Snelling Shops, August 1912. TCRT Class L-8. Weight 43,700 lbs.
Built as TCRT 1564-1566, they were sold to DSR November 13, 1912.

2 cars, 255-256, 31st St. Shops, May 1901. TCRT Class C-5. Weight 40,200 lbs.
Built as TCRT 868-869, TCRT rebuilt them during December 1912 for double-end, one-man operation. The rear gates and front motorman's cab door were removed and replaced with hinged doors, traps and steps located on the "gate side" only of each car. They were completed December 19th, shipped to Duluth, and placed in service on the isolated "Highland Ave." line January 18th and 22nd, 1913. They replaced two single-truck closed passenger motor cars. It required 18 horses to haul each carbody up the Mesaba Ave. hill, the trucks having been sent up separately earlier.
To cope with winter snows on this isolated line, each car was equipped with both V plows and small wing plows during the winter months.

6 cars, 257-262, Snelling Shops, September 1914. TCRT Class L-8. Weight 41,700 lbs.

4 cars, 263-266, Snelling Shops, December 1915. TCRT Class L-8. Weight 41,700 lbs.
Built as TCRT 1789-1792 they were sold to DSR May 13, 1916, for service on the "Morgan Park" extension.

4 cars, 267-270, Snelling Shops, November 1914. TCRT Class L-8. Weight 41,700 lbs.
Built as TCRT 1724,1719,1716,1722 respectively, they were sold to DSR July 27, 1916.

8 cars, 271-278, Snelling Shops, May 1917. TCRT Class L-8. Weight 41,700 lbs.

6 cars, 279-284. Due to the general economic boom that came with World War I, opening of shipbuilding facilities in Riverside, and increased production at the steel plant in Morgan Park, DSR experienced a substantial increase in business (39% in two years). More cars were needed, but TCRT had ceased carbuilding for the duration of the war. So TCRT leased six cars to DSR from December 24, 1917, through October 29, 1920. DSR 280-283 were TCRT 988-991 (same type as DSR 163-177) and DSR 279,284 were TCRT 1672-1673 (the same type as DSR 257-262).

6 cars, 289-294. Transporting the McDougall-Duluth Shipyard workers developed into a critical situation. Rioting and disorders erupted among the workers who felt that the streetcar service was insufficient. The Northern Pacific Ry. ran extra trains from the shipyards to the Union Station but this did not solve the problem. On August 27, 1918, DSR entered into a contract with the U.S. Shipping Board Emergency Fleet Corporation, a federal agency, which loaned DSR $81,500 for the purchase of six cars, one snow plow and one 1,000 KW rotary converter. Title to the equipment remained with the Fleet Corp. with DSR

as lessee, paying 5% interest per annum on the principal. DSR repaid the principal sum in 1921 thereby acquiring title to all of the equipment. 289-294 were TCRT 1202,1204,1212,1231,1232,1234 respectively. 289-291 were built in the 31st St. Shops in December 1906 as TCRT Class G-6; 292-294 were built in the 31st St. Shops in March 1907 as TCRT Class H-6.

PASSENGER CARS ACQUIRED WITH THE PARK POINT TRACTION COMPANY
September 1, 1917

1 car, PPTC 4, ex DSR 66, single-truck, closed passenger motor car. Westinghouse #3 motors. Sold for scrap 1919 to the West End Scrap Iron & Metal Co.

2 cars, 285-286, ex PPTC 10-11. St.Louis Car Co. 1905, double-truck,closed passenger motor cars. Length: body 29'4", overall 40'5"; width 8'4". Weight 40,616 lbs. Longitudinal seats.

2 cars, 287-288, ex PPTC 20-21. Danville Car Co. 1911, double-truck, closed passnger motor cars. Length: body 28'11", overall 41'1"; width 8'4". Weight 36,616 lbs. Longitudinal and transverse seats.

Two cars, 285-286, were equipped with four motors in November 1917 for fighting winter snow and ice.

In 1920 all four cars, 285-288, were converted for one-man operation.

When tracks were laid over the Aerial Bridge in 1930 all four cars, 285-288, were modified for through service to downtown Duluth. (1) The rigid pilots were replaced with safety devices similar to those on the Birney cars. (2) Door motors, steps, window guards, and various electrical equipment were modified and/or upgraded to make the cars safer and easier to operate as well as for compatibility with the standard cars then in operation.

PASSENGER CARS ACQUIRED FROM OTHER BUILDERS

6 cars, 295-300, American Car Company, September 1919. Single-truck Birney cars. 295-297 were single-end operated, while 298-300 were double-end operated. Length 28'0½". Width 8'0". One Brill 78M1F truck, two G.E. 258C motors, and K-63-B controllers (one on 295-297 and two on 298-300. Weight 13,000 lbs. for 295-297 and 13,900 lbs. for 298-300.

DSR had been looking for a smaller economical car to use on its low traffic lines in both cities. A decision was made to purchase single-truck Birney cars for this purpose. Single-end cars 295-297 were intended for the "Billings Park-Broadway" line in Superior and double-end cars 298-300 for the "Park Point" line. The double-end Birneys went into service October 1,1919; thereafter the four large double-truck cars were used primarily to handle beach traffic on summer evenings and Sundays. However the City of Superior refused to allow the use of Birney cars, so the single-end cars did not enter service until October 4, 1919, when they were placed on the "Kenwood" and "E. 9th St." lines in Duluth. The single-end Birneys were also used on the "Piedmont Ave." line. People protested they were unsafe, unsanitary, uncomfortable and unsuitable so their use was irregular in subsequent years.

Order 1213	295-297	7-7-1919	Bldrs Photo	9-9-1919
Order 1214	298-300	7-7-1919	Bldrs Photo	9-8-1919

5 cars, 301-305, Lightweight Noiseless Electric Street Car Co., April 1925. Double-truck Lightweight cars. Length 35'11", width 9'1". Two Twin City #12 trucks, 4 G.E. 258K motors, one rebuilt K-28 controller. Weight 24,200 lbs.

These cars were purchased as an economical design for use on low-revenue lines in Superior. They entered service April 19, 1925, and produced a considerable saving in power consumption: 1.53 kwh per car-mile compared to 2.96 kwh per car-mile on the large standard cars. Their chief use was on the "East End-Allouez" line.

The last streetcar to operate in Superior was 301 which tied-up at 1:10 a.m. Monday, June 24,1935, at Hill Ave. and Belknap St. All five cars were then hauled to Duluth by a steam locomotive over the Soo Line Ry. where they were used chiefly on the "West Duluth" line.

EQUIPMENT MAINTENANCE

Walter J. Smith, when he was Duluth St. Ry.'s master mechanic, established policies for servicing and maintaining the equipment which were followed for many years. A description of the practices followed in 1904 was typical.

Daily servicing consisted of sweeping out and dusting the interior, washing exterior windows, flushing the exterior, inspecting all parts for damage, oiling the motors and journals, adjusting the brakes, and refilling the sand boxes.

Each car was overhauled annually. The carbody was stripped of all window sash, doors, seats, fittings, fixtures, and electrical and mechanical equipment. The car was then scrubbed inside and outside. Any repairs to the carbody woodwork and floorboards were made next. A complete paint job then followed which consisted of (1) puttying holes, (2) three coats of lead paint, (3) three coats of flat color, and (4) three coats of varnish on the exterior and two coats on the interior. Meanwhile all of the electrical and mechanical equipment, and other items which had not been removed were all thoroughly inspected, repaired or overhauled, and repainted. The car was then reassembled. This entire process took about thirty days from start to finish.

REBUILDING PROGRAMS

Based on plans already devised and used by TCRT on its cars, DSR during November-December 1923 rebuilt ten cars, 268-274,276-278, into front exit cars. A 31" wide doorway with enclosed vestibule and steps replaced the motorman's cab door, a hot air underfloor heater replaced the hot water heating system, electric heaters were installed in the motorman's cab, and a screened opening replaced the window in the left front bulkhead to afford greater circulation of heated air. Two cars began operating on the "Woodland" line November 2nd, 1923.

As DSR's standard cars had been well-built and well-maintained it was decided in 1924 to rebuild certain cars for one-man operation on low-traffic lines in Superior. Features of this design were: (1) the rear platform was enclosed and a single set of mechanically-operated folding doors (for emergency exit only, operated by the motorman) with steps replaced the gates, (2) a double set of pneumatically operated folding doors with steps with an overall opening 52" wide were installed on the front platform, (3) front bulkhead doors were removed, and (4) controller and brake valve were equipped with dead-man safety features.

The first three cars so rebuilt were 163,165,166, May through August 1924, for the "Billings Park -Broadway" line. These three cars as rebuilt had the hinged door from the motorman's cab installed on the rear platform, without steps, as the emergency exit door. Five additional cars were rebuilt to the planned design (rear folding emergency exit doors and steps): two cars, 164 and 167, June through August 1925; two cars, 168 and 169, November 1925 through January 1926; and one car, 177, March through June 1926. After the train collision involving 169 in 1927, the first three cars (163,165,166) were fitted with rear folding emergency exit doors and steps.

In 1928 DSR determined that rising operating costs and Model T automobile competition called for the operation of one-man cars in Duluth as well. A more substantial design was developed. The rear platform was enclosed and a double set of narrow folding doors and steps, 33" wide opening, treadle operated, replaced the gates. A double set of pneumatically-operated doors with steps with an overall opening 52" wide were installed on the front platform. Leather-covered, cushioned, form fit seats were installed on 50 cars. Interior lights were moved from the window posts to the ceiling with glass lampshades. Ceilings were painted with white enamel. Rear end controls were installed for backing-up operations. Controllers and brake valves were equipped with deadman safety features. Cars rebuilt to this design included the following.

20 cars, 1928: 170-176,178-180,210-213,215-219,244. The first four cars completed (170-173) went into service April 1st on the "West Duluth-Aerial Bridge" line.
28 cars, 1929: 208,223-226,228-232,234,237-239,241-243,245-254,265.
17 cars, 1930: 198-207,209,214,227,236,240,266,268. The last car rebuilt was 205, completed August 30th.

One-man car 163 was rebuilt in October 1934 for double-end operation on the "Crosley Ave." line in Duluth. Service on this line had been changed to a shuttle operation. Birney cars normally provided the service but rush hours required a larger car so the solution was this rebuilding.

SEATING ARRANGEMENTS

The standard two-man cars had seven rows of double cross seats in the front half of the car with longitudinal benches on both sides in the rear half. Seating capacity 46 persons. During 1920-1921 the "pole side" rear bench was cut back from the rear bulkhead one space reducing the seating capacity to 45 persons.

The cars rebuilt with front-exit doors in 1923 had three rows of double cross seats at the front of the car removed and replaced with longitudinal benches on each side seating five persons each. Seating capacity was then 43 persons.

Cars rebuilt for one-man operation had eight rows of double cross seats located in the central portion of the car, with longitudinal benches on both sides at the front and rear. (The first seven cars rebuilt from 1924 to 1926 had seven rows of double cross seats.) On all cars a curved bench seat was installed on the rear platform. Seating capacity 51 or 52 persons.

The Birney cars had seven rows of wood-slat double cross seats. Seating capacity 28 persons.

The Lightweight cars had six rows of double cross seats in the central portion of the car, with longitudinal benches on both sides and the front and rear. The "pole side" rear bench seat extended around the rear platform. Seating capacity 42 persons.

MISCELLANEOUS EXTERNAL DETAILS

FENDERS

Experiments 3-23-1897 and 6-30-1897.
DSR design installed on all DSR cars and SRTR cars used on the "Interstate" line 1-24-1898.
(Local ordinances: Duluth 12-8-1896 and Superior 3-17-1899.)
The size was reduced in 1914 so cars could be coupled without removing the fender.

BUMPERS

Tapered rear bumper covers on all cars: May 1914.
Rubber buffers on all cars: October 1919.

HEADLIGHTS

Dayton Mfg. Co. #7 PC headlights for 47 cars March 1891.
DSR shop fabricated arc lights with silver-plated copper reflectors May 1897.
Prior to 1910 all TCRT-built cars received Imperial Junior carbon arc headlights.
By December 1917 these were replaced with incandescent Golden Glow headlights.

DESTINATION MARKER LIGHTS

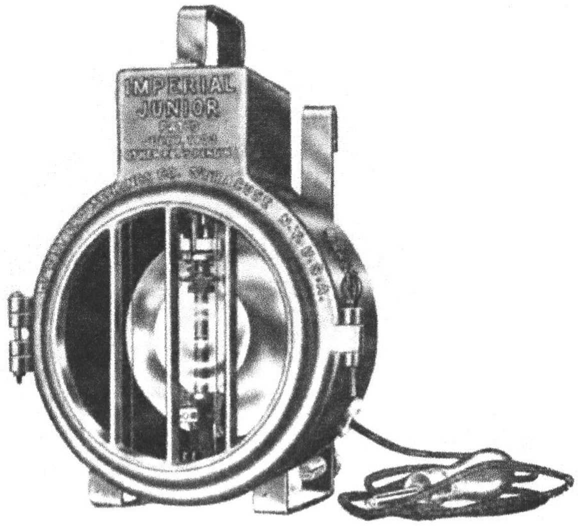
Used colored Lanterns July 1893.
Replaced with electric marker lights using changeable colored lenses: Duluth 1897, Superior 1902.
Replaced by Roll Sign Number system January 1920.

TAIL LIGHTS

Electric tail lights with red lenses installed November 1912 thru January 1914.
5" prismatic safety reflectors on all cars: April 1935.

OHIO BRASS CO. CATALOG APRIL 1908

Junior Imperial Arc Headlight



Junior Headlight. No. 10542

THE Junior Arc Headlight is intended for use on city trolley systems which extend into suburbs and pass through poorly lighted streets, as this service demands more illumination than Incandescent Headlights can produce.

The Junior Headlight will project sufficient light to illuminate the track a considerable distance ahead of the car without being too glaring, and the case is too small to interfere with the fender and it will withstand extremely rough usage.

Each Headlight is furnished with a 6-inch highly polished parabolic aluminum reflector.

The wiring equipments for single and double end cars are the same as those mentioned on page 246 for the Type B Headlight.

Code Word	No.		List Each
Fervency.	10542—	Headlight, without Wiring Equipment (as shown in cut)..	$13 50
Ferror.	10543—	" with complete Wiring Equipment for Single End Car	20 00
Festival.	10544—	Headlight, with complete Wiring Equipment for Double End Car	21 00

See list of Parts and Accessories on page 249.

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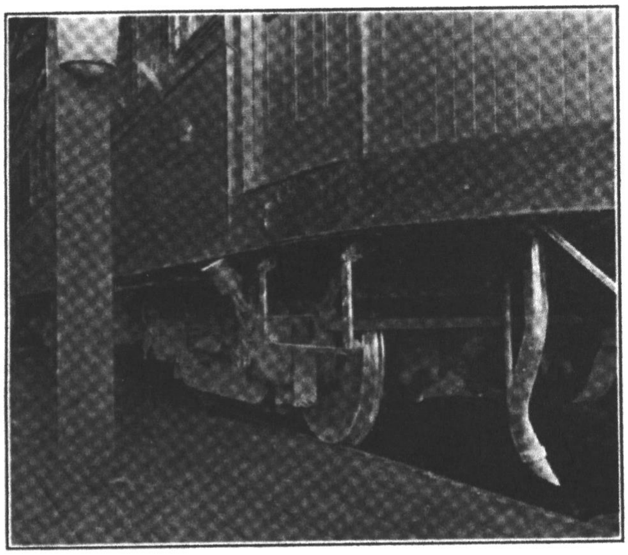
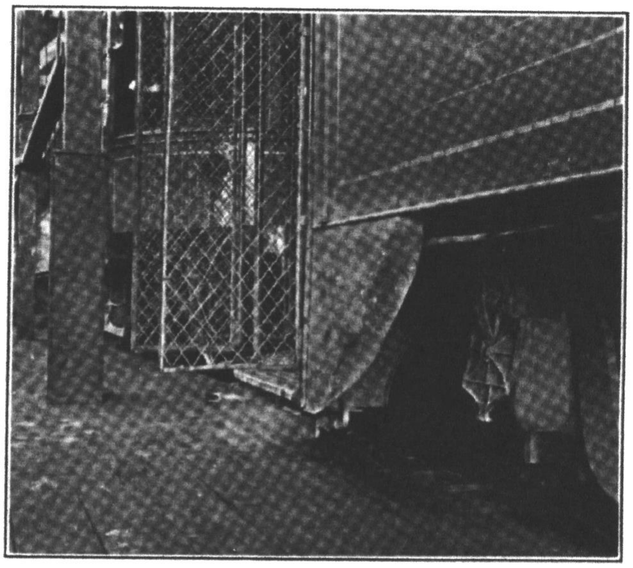
height. It is estimated that nearly a half hour was saved to those who used the Cambridge subway compared with the time formerly required by passengers to make the trip to the Stadium in Cambridge from Boston via surface lines exclusively.

SHEAR PLATE AND FOLDING STEPS IN DULUTH

The Duluth Street Railway Company has had considerable difficulty in the past with collisions between its cars and wagons in which the front and rear steps of its single-end cars have been damaged or torn away. To eliminate this trouble a folding step has been adopted for the front end of the car and a shear web has been applied just in front of the rear step, and this construction has been adopted as standard on all cars.



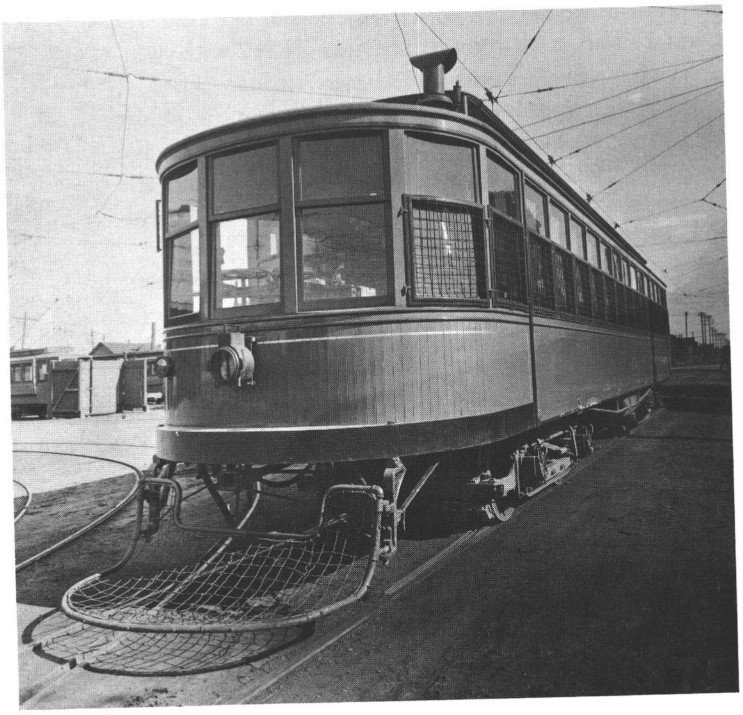
Folding Steps in Two Positions on Duluth Cars

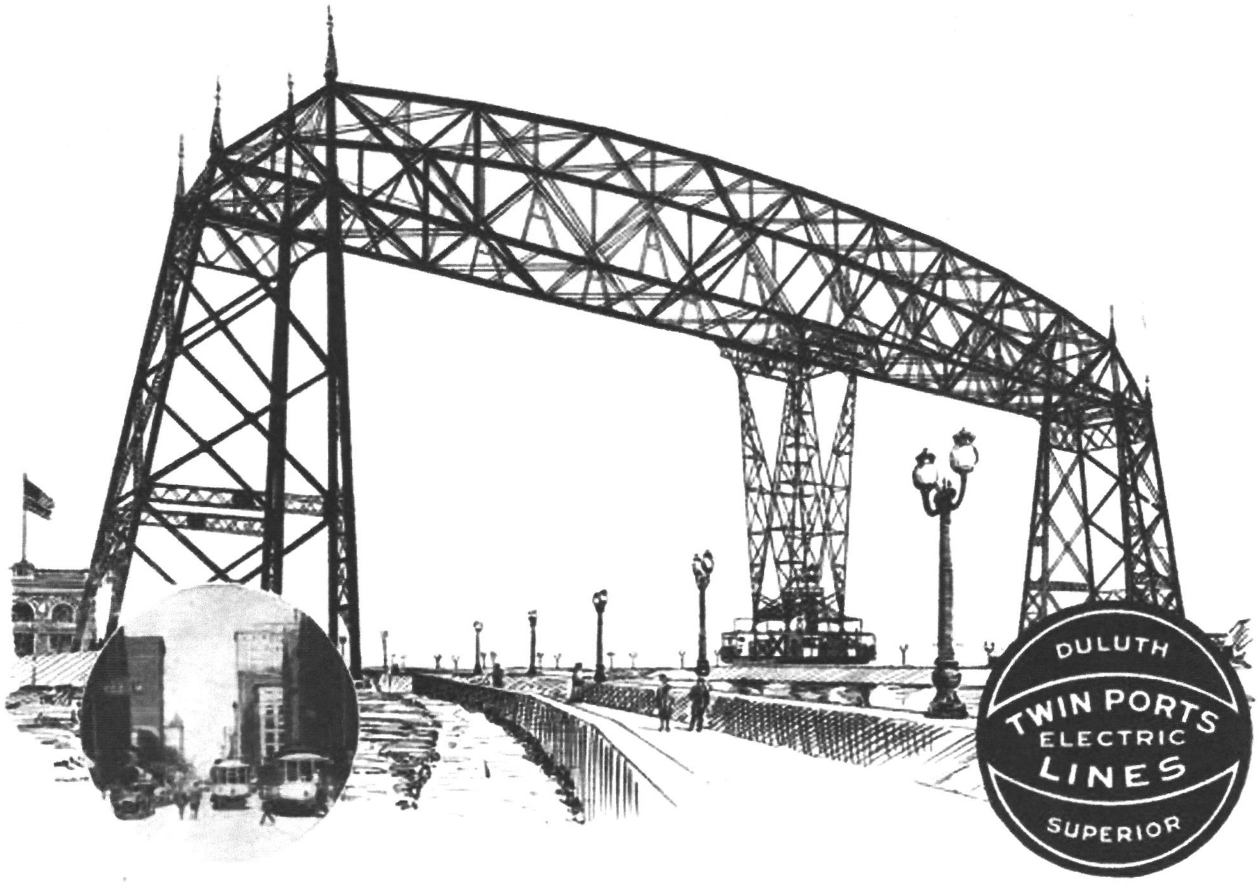


Shear Plate on Duluth Cars

The step at the front end of the car is of the stirrup type, purely for the use of the motorman, as the car is of the single-end type, and, when folded, this step is high enough so that a wagon wheel hub will pass under it. The step is of bar iron and is pivoted at the points of attachment to the car body and between the horizontal bar and the uprights. This permits the step to collapse under the car side sill when struck by a wagon wheel. The view shows it in both positions, it being supported in the collapsed position by a hand.

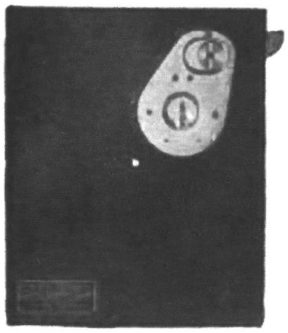
The shear plate at the rear step is simply a protective device to force a wagon wheel away from the step and gates. It is bolted to the side sill and end sill in the vertical angle formed by the side sill and steps and is held rigidly in position by a forged bracket. The web is triangular-shaped with the hypothenuse of the triangle dished or rounded into the center of the car body so that the shearing action is away from the car. A view of the shear plate is also published.





Rico Coasting Recorders

Complete installation for the
TWIN PORTS ELECTRIC LINES
DULUTH-SUPERIOR



The Duluth Street Railway, which serves the great ore-handling ports of Duluth and Superior, has recently been added to the list of electric railways which recognize that

Coasting is the True Measure of Operating Efficiency

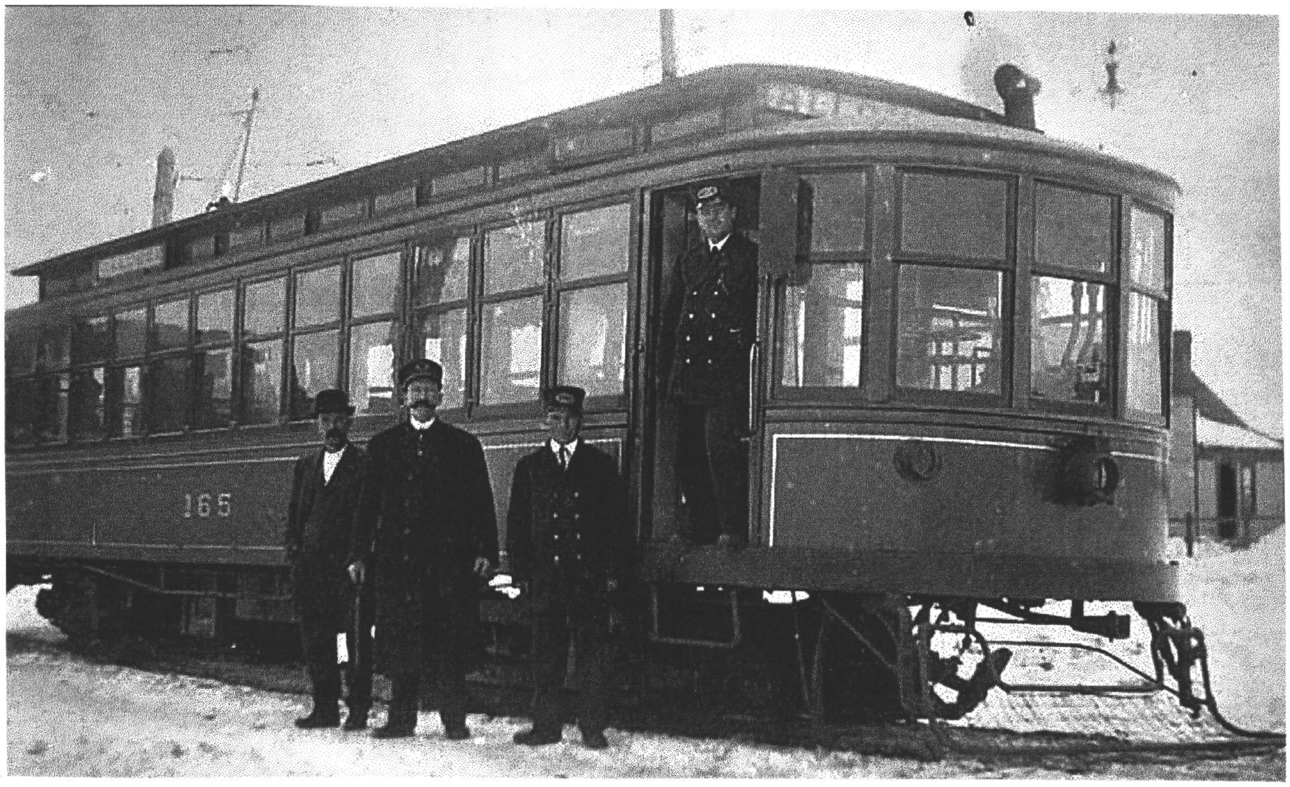
and that the most logical way to improve coasting is to have available for comparison and encouragement the *printed* trip-by-trip record of *coasting* or *no-power* and *no-braking* time furnished by the Rico Coasting Recorder.

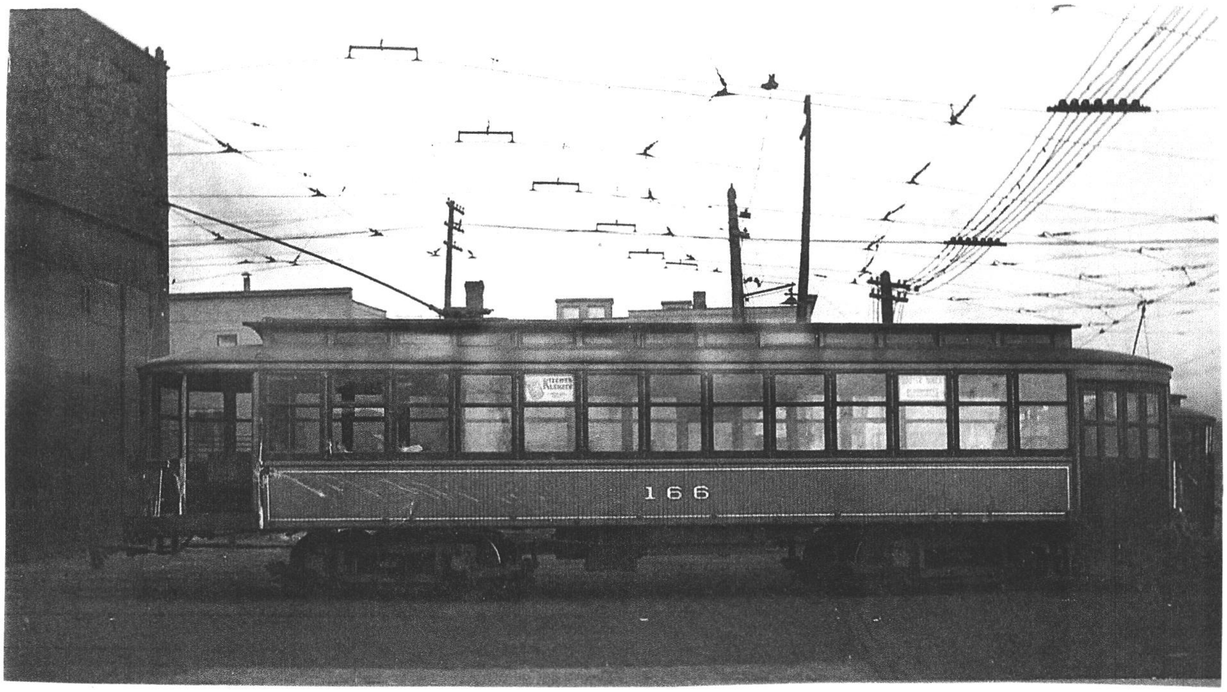
Time is the Essence of Railroading

RAILWAY IMPROVEMENT CO. 61 BROADWAY, NEW YORK

Three cars 163, 165, 166 had been selected for conversion for one-man operation of the Kenwood Ave. line which was in the process of being extended in May 1924 after litigation between DSR and the city. These cars were from the second oldest group built in 1904 (163-177). These cars had drop rear platforms but straight front platforms so the carbodies were turned end for end. The three cars were rebuilt during May thru August 1924. This procedure was NOT used on subsequent wood-underframe cars rebuilt for one-man operation. On September 25, 1924, the Wisconsin Railroad Commission gave DSR permission to operate one-man cars in Superior. The three cars were sent immediately to Superior for service on the Billings Park-Broadway line. (163 was rebuilt for double end operation in 1934 for the Crosley Ave. line.)

Rebuilding cost of wood underframe cars $1,970 each; steel underframe cars $1,600 each.





CARS REMODELED TO ONE MAN ORERATION

CAR No.	IN SHOP	FINISHED	REMARKS
163	5-16-24	8-26-24	
165	" " "	" " "	
166	6-20-"	" 28-"	
164	" 26-25	" 24-25	
167	" " "	" " "	
168	11-16-"	1-29-26	
169	" " "	" 30 "	WRECKED 1-6-27
177	3-10-26	6-26-"	
7 CARS			
170	1-10-28	2-18-28	
171	" " "	" " "	
172	" 21-"	3-20-"	
173	" " "	" " "	
174	2-18-"	4-10-"	
175	" " "	" " "	
176	3-20-"	5-3-"	
178	" " "	" " "	
179	4-10-"	" 31 "	
180	" " "	6-2-"	
215	7-5-28	9-2-28	
219	" " "	" " "	
213	" 26-"	" 9-"	
216	" " "	" " "	
244	9-3-"	10-18-"	
210	" 7-"	" " "	
211	" 30-"	11-13-"	
212	" " "	" " "	
217	10-18-"	12-17-"	
218	" " "	" " "	
20 CARS.			
241	12-17-28	2-13-29	
234	1-2-29	" " "	
223	" " "	3-10-"	
252	" 12-"	" 14-"	
245	2-13-"	" 30-"	
237	" " "	4-2-"	
250	3-10-"	"-20-"	
247	" 15-"	" " "	
254	" 30-"	5-15-"	
249	4-2-"	" " "	
226	" 23-"	6-12-"	
232	" " "	" " "	
231	5-15-"	7-3-"	
243	" " "	"-5-"	
248	6-12-"	" 25-"	
251	" " "	" " "	
253	7-5-"	8-23-"	
239	" 6-"	" " "	
229	" 25-"	9-16-"	
265	" " "	" " "	
242	8-23-"	10-8-"	
246	" 24-"	" " "	
225	9-17-"	" 31-"	
208	" " "	" " "	
238	10-8-"	12-7-"	
224	" " "	" " "	
228	" 31-"	" 28-"	
230	" " "	" " "	
227	12-7-"	1-31-30	

1928

27 CARS SIMPLEX SAFETY

1929

GEN. ELECTRIC SAFETY

1928	175	" " "	" " "		27 CARS SIMPLEX SA
	176	3-20-"	5-3-"		
	178	" " "	" " "		
	179	4-10-"	" 31 "		
	180	" " "	6-2-"		
	215	7-5-28	9-2-28		
	219	" " "	" " "		
	213	" 26-"	" 9-"		
	216	" " "	" " "		
	244	9-3-"	10-18-"		
	210	" 7-"	" " "		
	211	" 30-"	11-13-"		
	212	" " "	" " "		
	217	10-18-"	12-17-"		
	218	" " "	" " "		
	20 CARS				
1929	241	12-17-28	2-13-29		45 CARS GEN. ELECTRIC SAFETY
	234	1-2-29	" " "		
	223	" " "	3-10-"		
	252	" 12-"	" 14-"		
	245	2-13-"	" 30-"		
	237	" " "	4-2-"		
	250	3-10-"	"-20-"		
	247	" 15-"	" " "		
	254	" 30-"	5-15-"		
	249	4-2-"	" " "		
	226	" 23-"	6-12-"		
	232	" " "	" " "		
	231	5-15-"	7-3-"		
	243	" " "	"-5-"		
	248	6-12-"	" 25-"		
	251	" " "	" " "		
	253	7-5-"	8-23-"		
	239	" 6-"	" " "		
	229	" 25-"	9-16-"		
	265	" " "	" " "		
	242	8-23-"	10-8-"		
	246	" 24-"	" " "		
	225	9-17-"	" 31-"		
	208	" " "	" " "		
	238	10-8-"	12-7-"		
	224	" " "	" " "		
	228	" 31-"	" 28-"		
	230	" " "	" " "		
	227	12-7-"	1-31-30		
	268	" " "	" " "		
	30 CARS				
1930	266	1-9-30	2-22-30		
	240	" 16-"	" " "		
	203	2-3-"	3-20-"		
	204	" " "	" " "		
	200	" 22-"	4-12-"		
	202	" " "	" " "		
	201	3-20-"	5-6-"		
	206	" " "	" " "		
	198	4-14-"	" 29-"		
	199	" 21 "	" " "		
	209	5-6-"	6-27-"		
	236	" " "	" " "		
	207	6-6-"	7-31-"		
	214	1-9-"	" " "		
	205	6-27-"	8-30-"		

15 CARS
TOTAL 72 CARS

Mech. Dept.

THE DULUTH STREET RAILWAY Co.
CARS WITH GEN. ELECTRIC SAFETY EQUIPMENT

CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED
198	5-28-30	208	10-31-29	230	12-28-29	242	10-8-29	253	8-23-29
199	" " "	209	6-27-30	231	7-3-"	243	7-5-"	254	5-15-"
200	4-12-"	214	8-1-"	232	6-12-"	245	3-30-"	265	6-16-"
201	5-6-"	223	3-10-29	234	2-13-"	246	10-8-"	266	2-22-30
202	4-12-"	224	12-7-"	236	6-27-30	247	4-20-"	268	1-31-"
203	3-20-"	225	10-31-"	237	4-2-29	248	7-25-"	295	10-1-19
204	" " "	226	6-12-"	238	12-7-"	249	5-15-"	296	" " "
205	8-30-"	227	1-31-30	239	8-23-"	250	4-20-"	297	" " "
206	5-6-"	228	12-28-29	240	2-22-30	251	7-25-"	298	" " "
207	8-1-"	229	9-16-"	241.	2-13-29	252	3-14-"	299	" " "
								300	" " "

51 CARS IN ALL
9-10-30

Mech, Dept.

THE DUL. ST. R'Y. Co.
CARS WITH SIMPLEX SAFETY EQUIPMENT

CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED
163	9-27-24	174	4-10-28	210	10-18-28	255	6-1930	301	4-19-25
164	8-24-25	175	" " "	211	11-13-"	256	" "	302	" " "
165	9-27-24	176	5-3-"	212	" " "			303	" " "
166	" " "	177	6-8-26	213	9-30-"			304	" " "
167	8-24-25	178	5-3-28	215	" 2 "			305	" " "
168	1-29-26	179	" 31-"	216	" 30-"				
170	2-18-28	180	6-2-"	217	12-17-"				
171	" " "			218	" " "	INCLINE CAB			6-1930
172	3-20 "			219	9-2-"				
173	" " "			244	10-18-"				

34 CARS + INCLINE
Year 1931

THE DULUTH STREET RAILWAY Co.
CARS WITH REAR TREADLE STEP EQUIPMENT

CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED
170	5-2-29	198	6-28-30	209	6-27-30	223	3-10-29	236	6-27-30	247	4-20-29
171	" 10- "	199	" " "	210	10-18-28	224	12-7-29	237	4-2-29	248	7-25- "
172	4-22- "	200	4-12- "	211	11-13- "	225	10-31- "	238	12-7- "	249	5-15- "
173	5-20- "	201	5-6- "	212	" " "	226	6-12- "	239	8-23- "	250	4-20- "
174	6-8- "	202	4-12- "	213	9-30- "	227	1-31-30	240	2-22-30	251	7-25- "
175	5-28- "	203	3-20- "	214	8-1-30	228	12-28-29	241	2-13-29	252	3-14- "
176	6-15- "	204	" " "	215	9-2-28	229	9-16- "	242	10-8- "	253	8-23- "
178	7-29- "	205	8-30- "	216	9-30- "	230	12-28- "	243	7-5- "	254	5-15- "
179	8-6- "	206	5-6- "	217	12-17- "	231	7-3- "	244	10-18-28	265	6-16- "
180	8-15- "	207	8-1- "	218	" " "	232	6-12- "	245	3-30-29	266	2-22-30
		208	10-31-29	219	9-2- "	234	2-13- "	246	10-8- "	268	1-31- "

65 CARS IN ALL

Mech. Dept.

THE DUL. ST. R'Y. CO.
CARS HAVING LEATHER CUSHION SEATS

CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED	CAR No.	DATE INSTALLED
170	2-18-28	208	10-31-29	223	3-10-29	234	2-13-29	248	7-26-29
171	" " "	210	10-18-28	224	12-7- "	238	12-7- "	249	5-15- "
172	3-20- "	211	11-13- "	225	10-31- "	239	8-23- "	250	4-20- "
173	" " "	212	" " "	226	6-12- "	240	2-22-30	251	7-25- "
174	4-10- "	213	9-30- "	227	1-31-30	241	2-13-29	252	3-14- "
175	" " "	215	9-2- "	228	12-28-29	242	10-8- "	253	8-23- "
176	5-3- "	216	9-30- "	229	9-16- "	243	7-5- "	254	5-15- "
178	" " "	217	12-17- "	230	12-28- "	244	10-18-28	265	9-16- "
179	5-31- "	218	" " "	231	7-3- "	246	10-8-29	266	2-22-30
180	6-2- "	219	9-2- "	232	6-12- "	247	4-20- "	268	1-31- "

50 CARS IN ALL
9-10-30

THE DUL. ST. RY. Co. 1931
ONE MAN CARS WITH PNEUMATIC SANDERS

L.F. = LEFT FRONT
R.F. = RIGHT "
L.R. = LEFT REAR

CAR No.	LOCATIONS			CAR No.	LOCATIONS			CAR No.	LOCATIONS			CAR No.	LOCATIONS		
	L.F.	R.F.	L.R.		L.F.	R.F.	L.R.		L.F.	R.F.	L.R.		L.F.	R.F.	L.R.
163		O		205	O	O	O	232	O	O	O	265	O	O	O
164		O		206	O	O	O	234	O	O	O	266	O	O	O
165		O		207	O	O	O	236	O	O	O	268	O	O	O
166		O		208	O	O	O	237	O	O	O	~~285~~		O	O
167		O		209	O	O	O	238	O	O	O	~~286~~		O	O
168		O		210	O		O	239	O	O	O	~~287~~		O	O
170	O		O	211	O		O	240	O	O	O	~~288~~		O	O
171	O		O	212	O		O	241	O	O	O	295	O	O	
172	O		O	213	O		O	242	O	O	O	296	O	O	
173	O		O	214	O	O	O	243	O	O	O	297	O	O	
174	O		O	215	O	O	O	244	O		O	298	O	O	O O
175	O		O	216	O		O	245	O	O	O	299	O	O	O O
176	O		O	217	O		O	246	O	O	O	300	O	O	O O
177		O		218	O		O	247	O	O	O	301	O	O	
178	O		O	219	O		O	248	O	O	O	302	O	O	
179	O		O	223	O	O	O	249	O	O	O	303	O	O	
180	O		O	224	O	O	O	250	O	O	O	304	O	O	
198	O	O	O	225	O	O	O	251	O	O	O	305	O	O	
199	O	O	O	226	O	O	O	252	O	O	O				
200	O	O	O	227	O	O	O	253	O	O	O				
201	O	O	O	228	O	O	O	254	O	O	O				
202	O	O	O	229	O	O	O	255		O	O				
203	O	O	O	230	O	O	O	256		O	O				
204	O	O	O	231	O	O	O								

2.15 SAND TRAPS

85 CARS

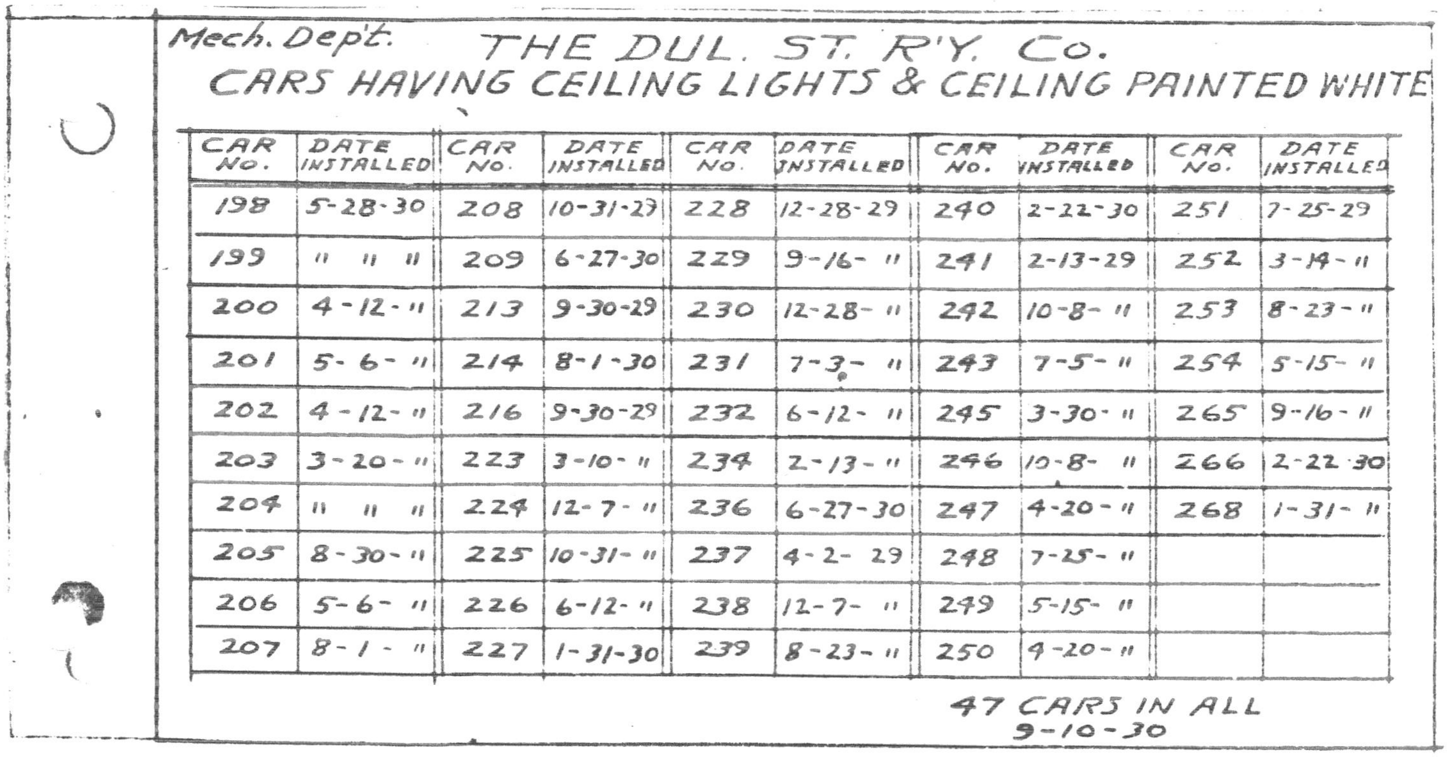
JAN. - THE DULUTH STREET RAILWAY Co. - 1931
TWO MAN CARS WITH

V = FRONT MECH. SANDER
O = REAR PNEUMATIC "

CAR No	LOCATION			CAR No.	LOCATION			CAR No.	LOCATION			CAR No.	LOCATION		
	L.F.	R.F.	L.R.		L.F.	R.F.	L.R.		L.F.	R.F.	L.R.		L.F.	R.F.	L.R.
181		V		196		V	O	271		V	O				
182		V		197		V	O	272		V	O				
183		V		222		V	O	273		V	O				
184		V	O	233		V	O	274		V	O				
185		V	O	235		V	O	275		V	O				
186		V	O	257		V	O	276		V	O				
187		V		258		V	O	277		V	O				
188		V		259		V	O	278		V	O				
189		V		260		V	O	289		V	O				
190		V	O	261		V	O	290		V	O				
191		V	O	262		V	O	291		V	O				
192		V	O	263		V	O	292		V	O				
193		V	O	267		V	O	293		V	O				
194		V	O	269		V	O	294		V	O				
195		V	O	270		V	O								

38 SAND TRAPS

44 CARS



Mech. Dep't.

THE DUL. ST. R'Y. Co.

CARS HAVING CEILING LIGHTS & CEILING PAINTED WHITE

CAR NO.	DATE INSTALLED	CAR NO.	DATE INSTALLED	CAR NO.	DATE INSTALLED	CAR NO.	DATE INSTALLED	CAR NO.	DATE INSTALLED
198	5-28-30	208	10-31-29	228	12-28-29	240	2-22-30	251	7-25-29
199	" " "	209	6-27-30	229	9-16- "	241	2-13-29	252	3-14- "
200	4-12- "	213	9-30-29	230	12-28- "	242	10-8- "	253	8-23- "
201	5-6- "	214	8-1-30	231	7-3- "	243	7-5- "	254	5-15- "
202	4-12- "	216	9-30-29	232	6-12- "	245	3-30- "	265	9-16- "
203	3-20- "	223	3-10- "	234	2-13- "	246	10-8- "	266	2-22-30
204	" " "	224	12-7- "	236	6-27-30	247	4-20- "	268	1-31- "
205	8-30- "	225	10-31- "	237	4-2-29	248	7-25- "		
206	5-6- "	226	6-12- "	238	12-7- "	249	5-15- "		
207	8-1- "	227	1-31-30	239	8-23- "	250	4-20- "		

47 CARS IN ALL
9-10-30

ALSO USED ON DSR
ONE-MAN CARS

Electric Railway Journal Maintenance Data Sheet

PAGE 119

Circuit Breaker and Hand Brake Provide Car-Backing-Up Device*

By L. Tait

Manager London Street Railway, London, Ont.

Due to increasing auto traffic and because the London Street Railway, London, Ont., turns cars at Y's on several of its lines, some plan to back up single-end safety cars from the rear was desirable. The plan adopted includes the installation of a circuit breaker and hand brake at the rear of the car. A National Brake Company's Peacock staffless brake was placed between the back cross seat and the small seat on the side of the car so that no seating space was lost. The circuit breaker was installed directly above the hand brake on the side of the car.

Wiring between the front of the car and the rear circuit breaker is carried through the roof and along the top of the car in conduit. A knife switch on a slate base inclosed in a wooden box is placed on the side of the car to the left of the controller. This switch is connected at the top terminal to the front circuit breaker and the bottom terminal to the controller. The bottom terminal also has a wire connection through the conduit to the circuit breaker at the rear. The accompanying diagram shows the connections.

To operate a car from the rear end the knife switch is opened and the controller handle is placed in the first running position, the deadman release being hooked down, and the reverse handle in position for backward movement. The car can then be operated from the rear by closing the circuit breaker with the left hand and operating the hand brake with the right hand.

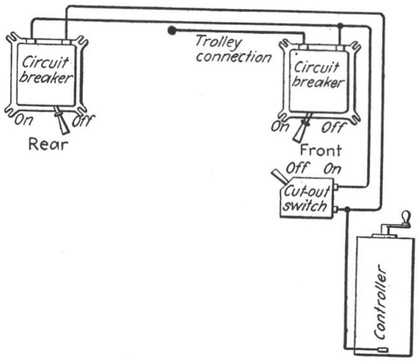


Diagram of circuit breaker and cut-out switch for back movement of single-end car

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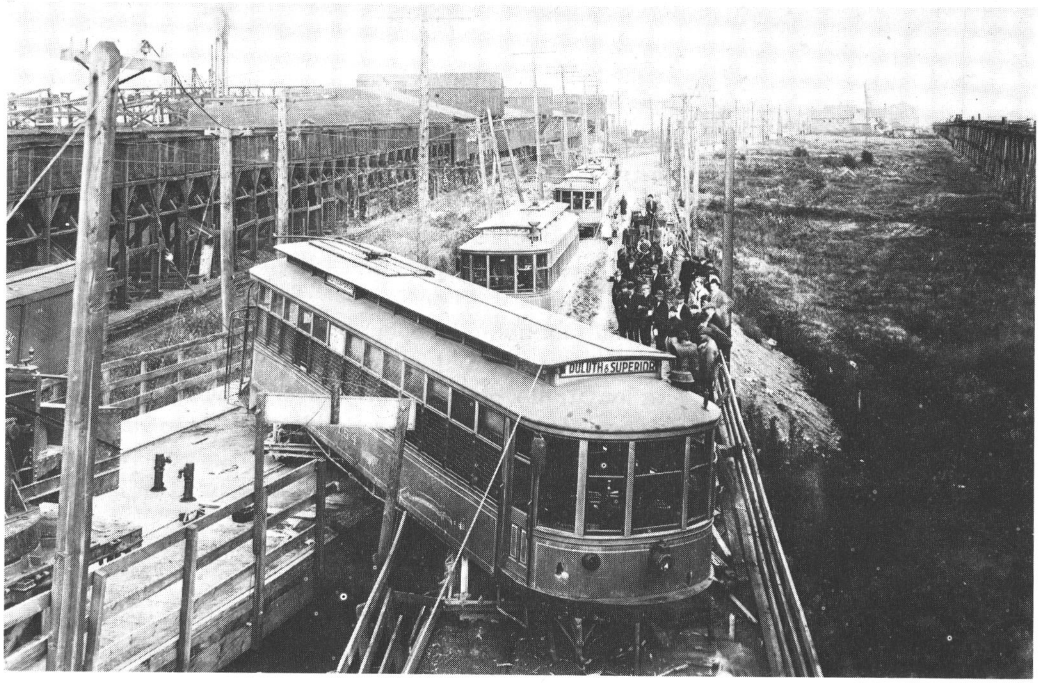
*Submitted in Electric Railway Journal *Prize Contest.*

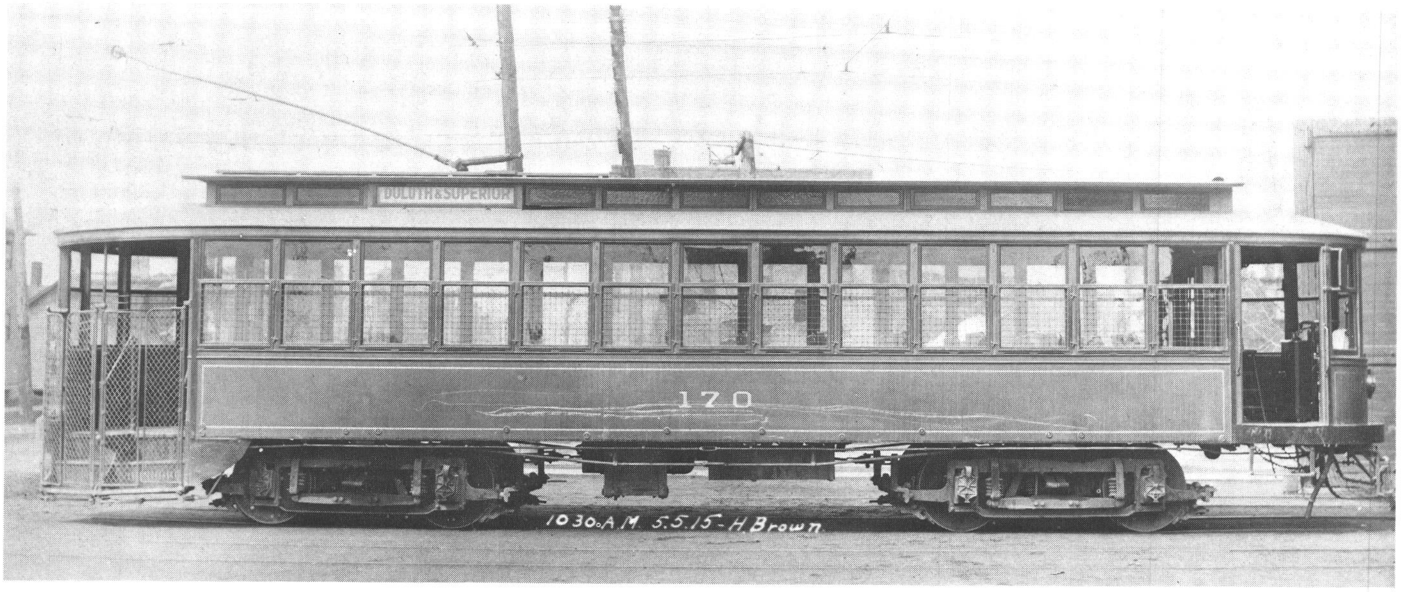

DULUTH&SUPERIOR

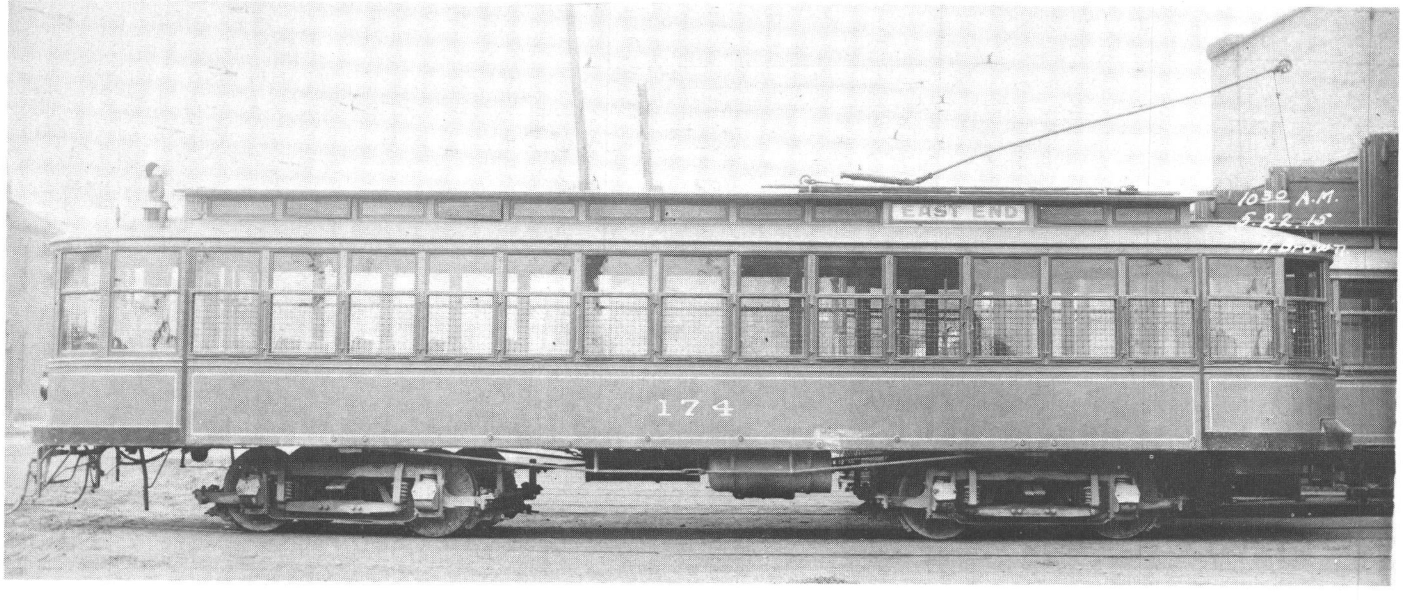
Above: Good photographs of Class B-3 cars 151-162 are rare. Here is 154 derailed on the Superior approach to the Duluth-Superior Bridge, September 12, 1913.

Center: Class D-7 car 170 at the Superior carhouse, May 5, 1915.

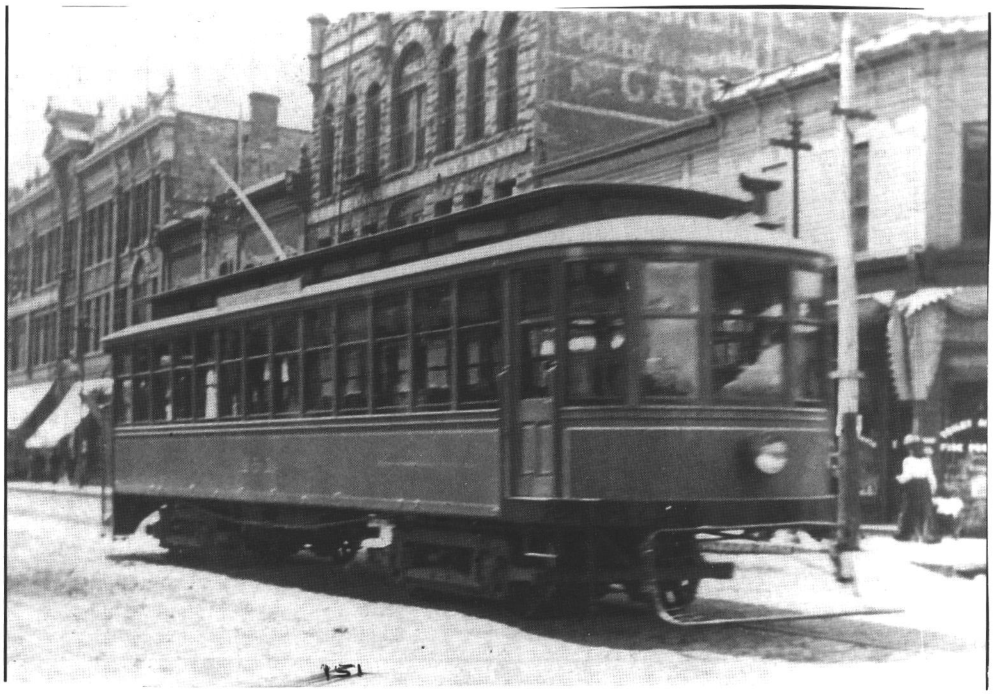
Below: "Pole side" of Class D-7 car 174, also at the Superior carhouse, May 22, 1915.

(All photographs DSR; Wayne C. Olsen collection)

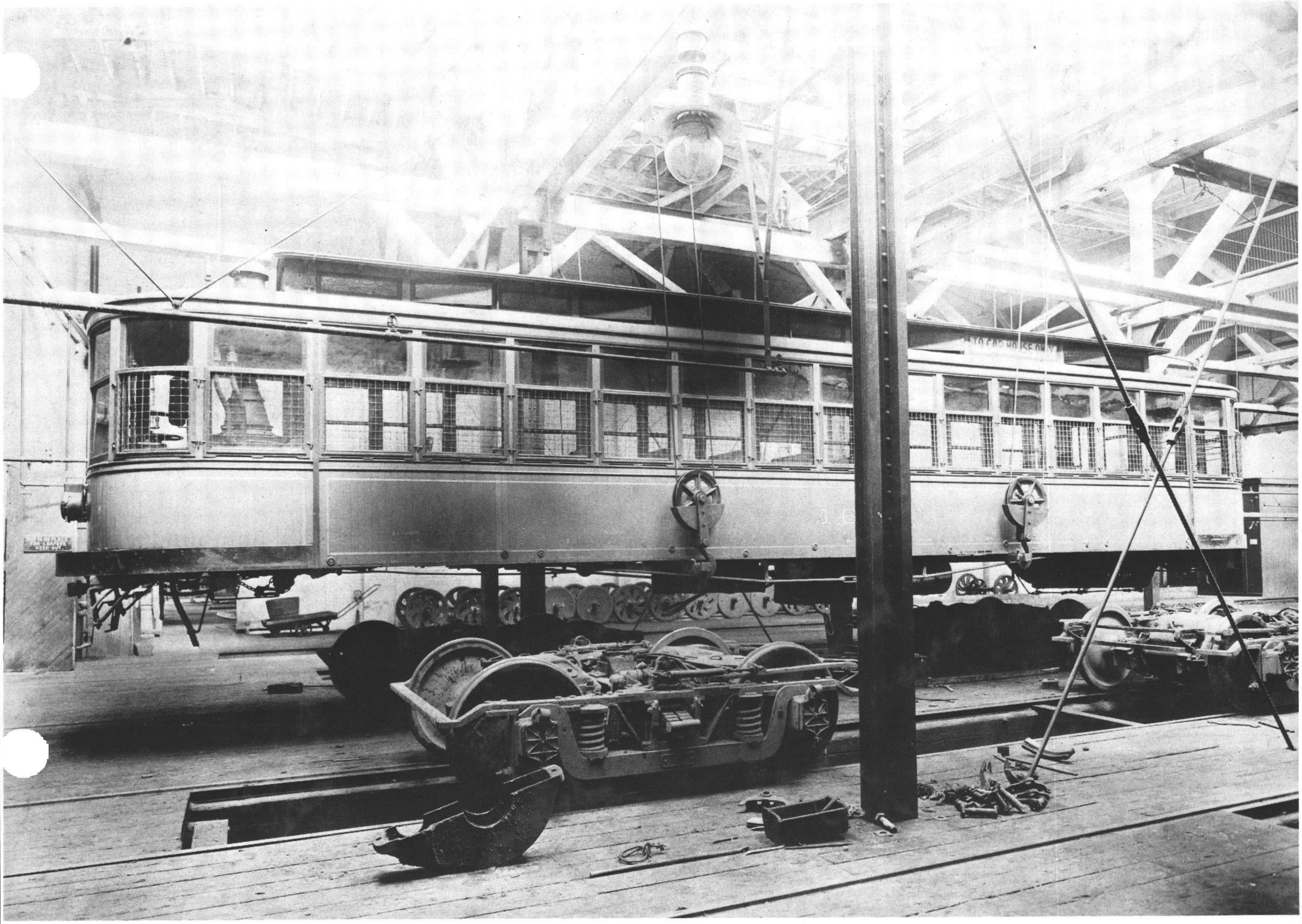

DULUTH&SUPERIOR
170
1030 A.M. 5.5.15 - H.Brown


EAST END
174
1030 A.M.
5.22.15
H. Brown

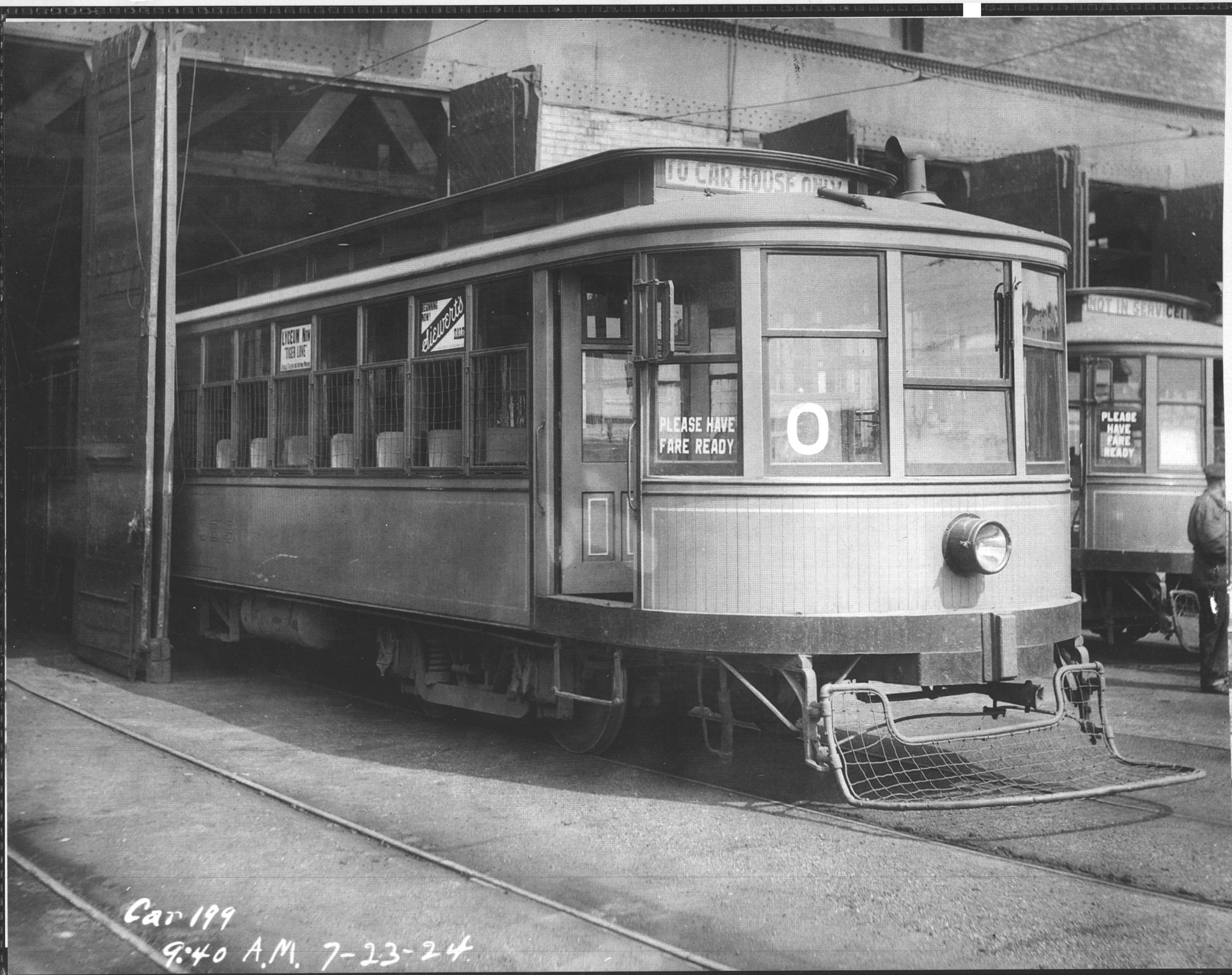
AVERY®
POLY VU



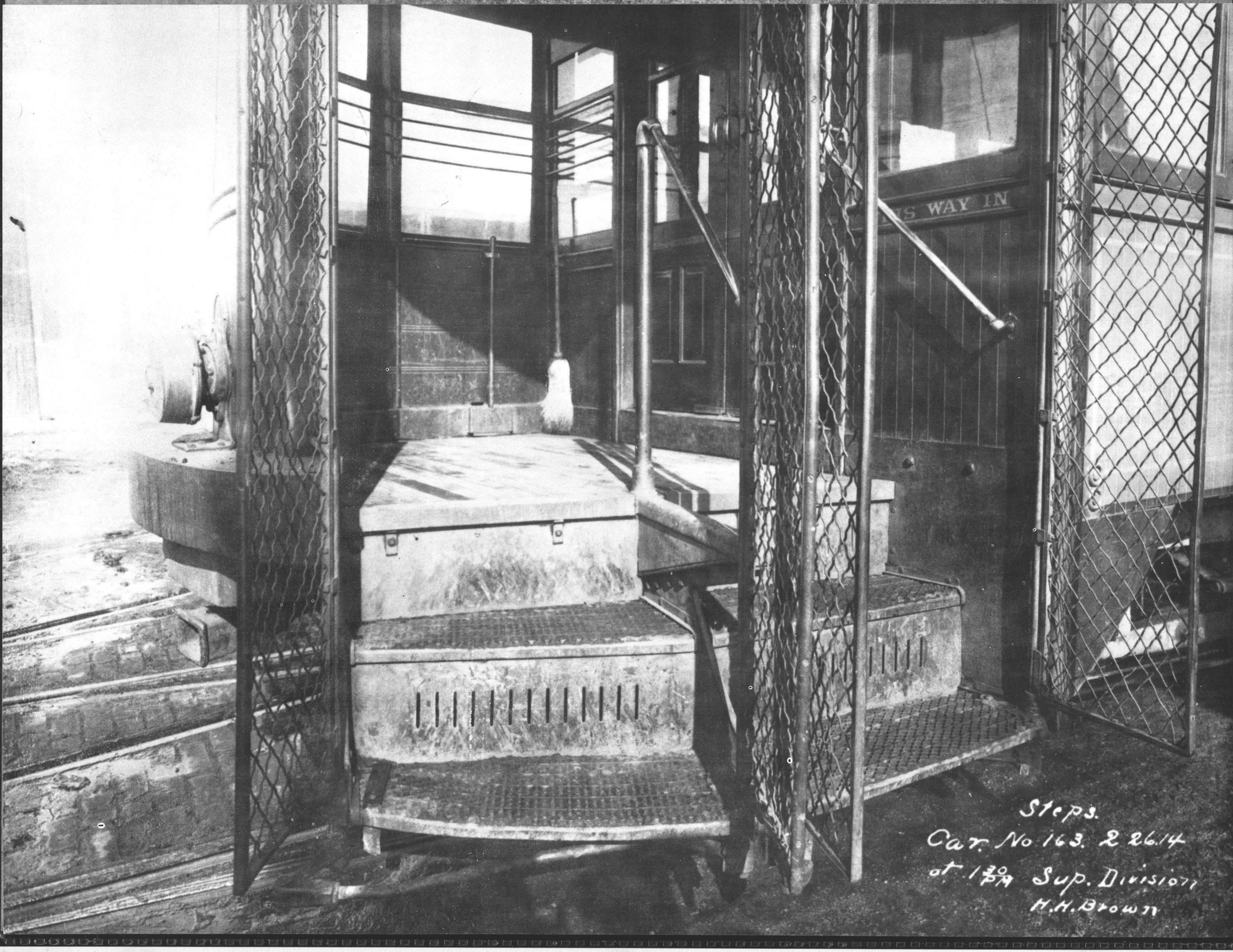
A photograph of the Duluth repair shop taken October 7, 1913. In the foreground is a Twin City #5 truck. The sign on the door by the car's front bumper reads: "This Is No Place For Loafers. Keep Out." (DSR; Wayne C. Olsen collection)



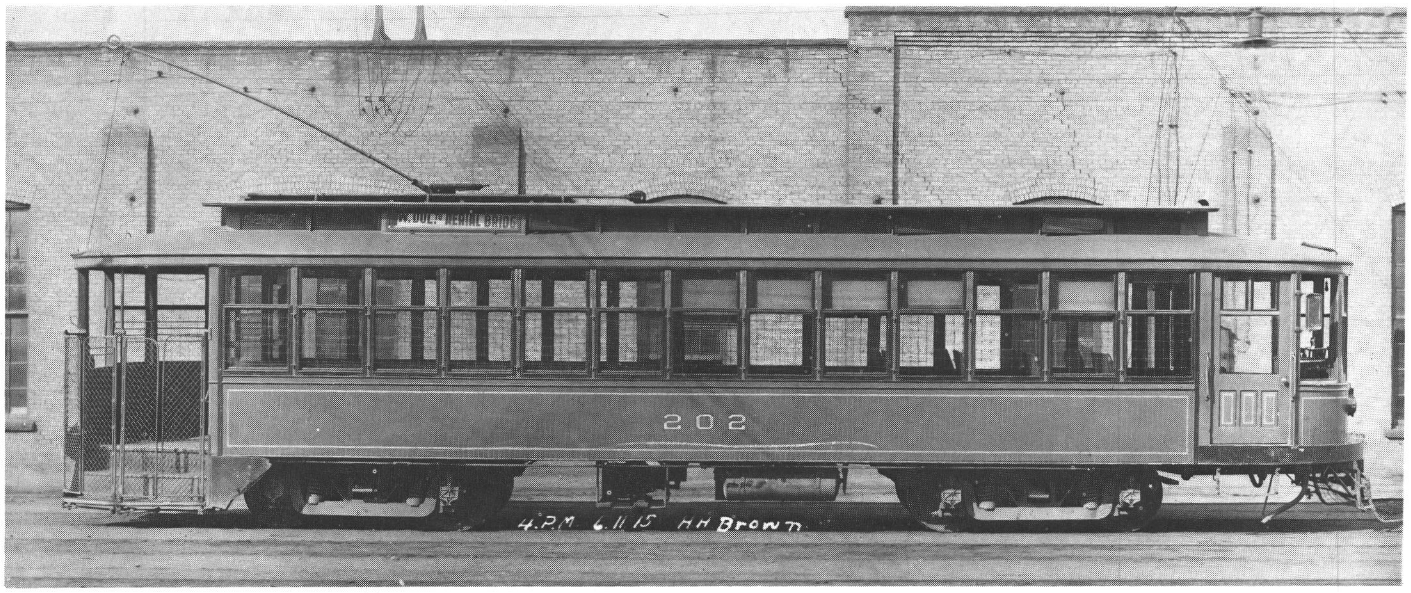
AVERY
PV119ED

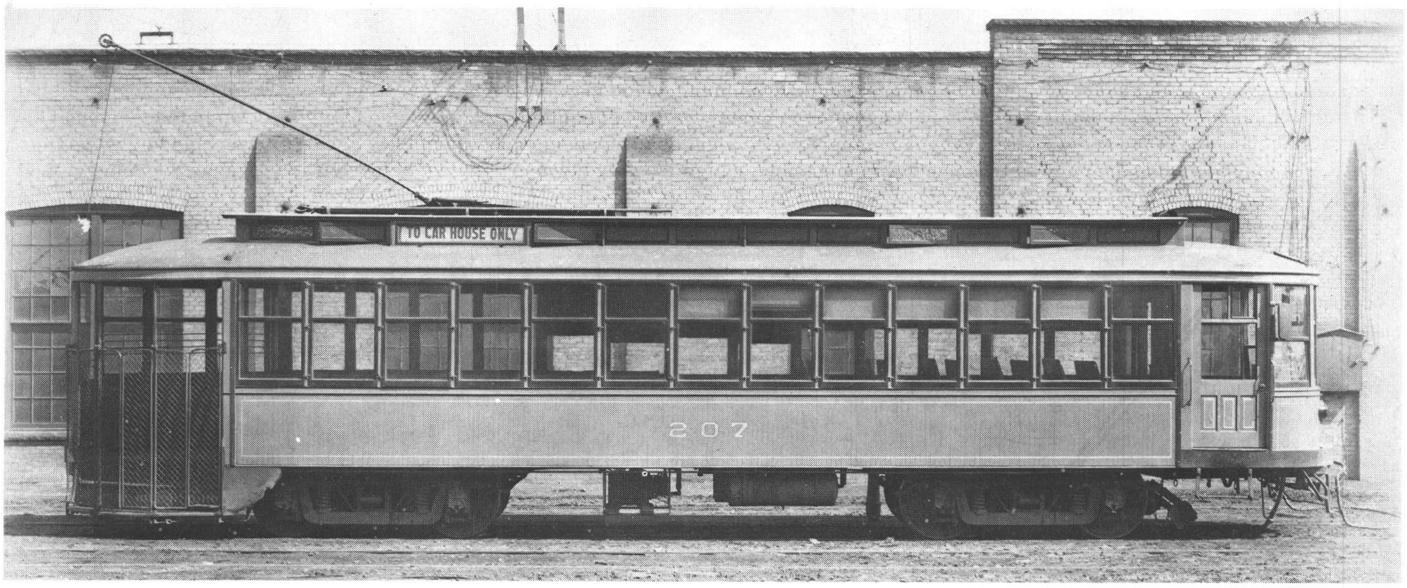

TO CAR HOUSE ONLY
LYCEUM Now "TIGER LOVE"
Siewert's
PLEASE HAVE FARE READY
0
NOT IN SERVICE
PLEASE HAVE FARE READY

Car 199
9:40 A.M. 7-23-24



Steps.
Car. No 163. 2 26.14
at 1$^{30}_{PM}$ Sup. Division
H.H. Brown

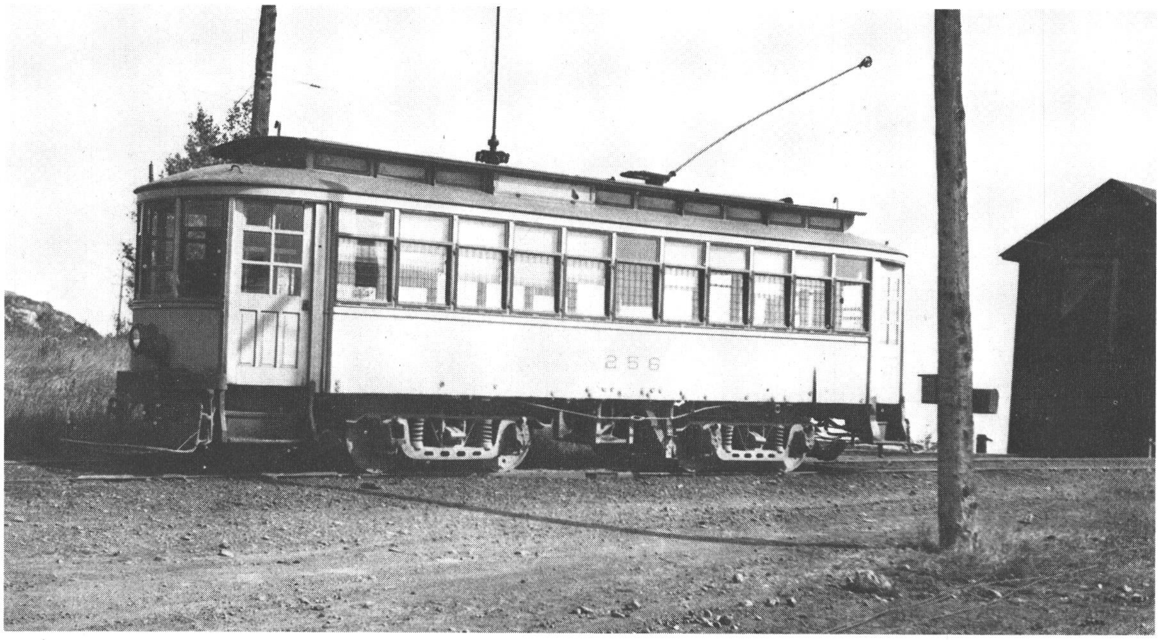

W. DUL. AERIAL BRIDG
202
4.P.M 6.11.15 H H Brown

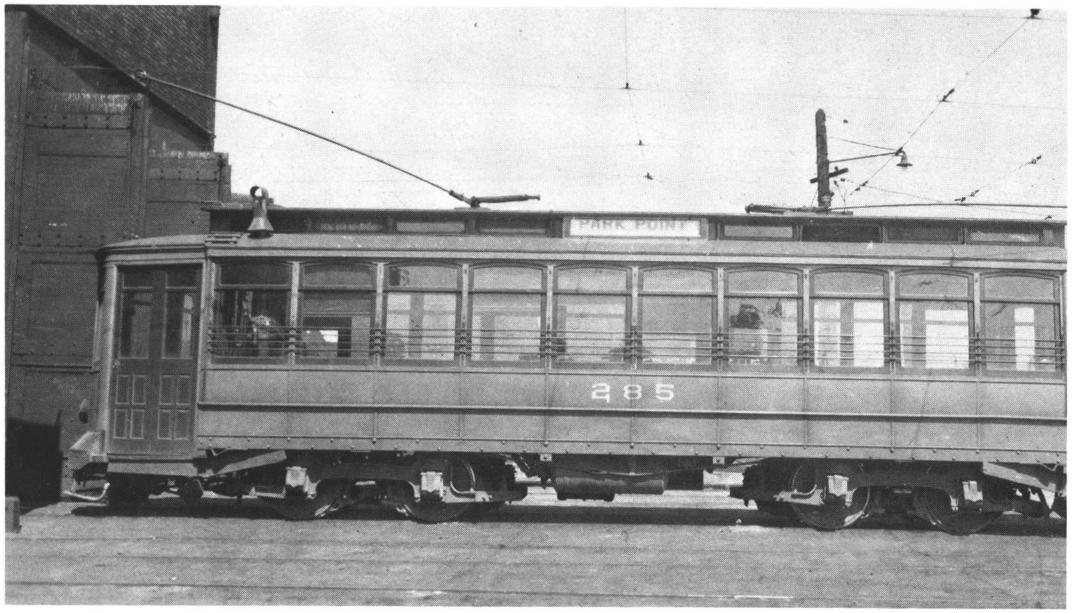

TO CAR HOUSE ONLY
207

Class I-1 car 202 (above) and Class K-2 car 207 (center) at the Duluth carhouse in 1915 and 1913 respectively. The pivot-bolt stirrup step below the motorman's cab door and skirt at the rear steps were developed in 1913 to minimize damage and reduce repair costs from automobile collisions.

Below: Car 256 at the "Highland Ave." line carhouse in the late 1930's when Twin City #9 trucks had replaced the original Brill 02 trucks.

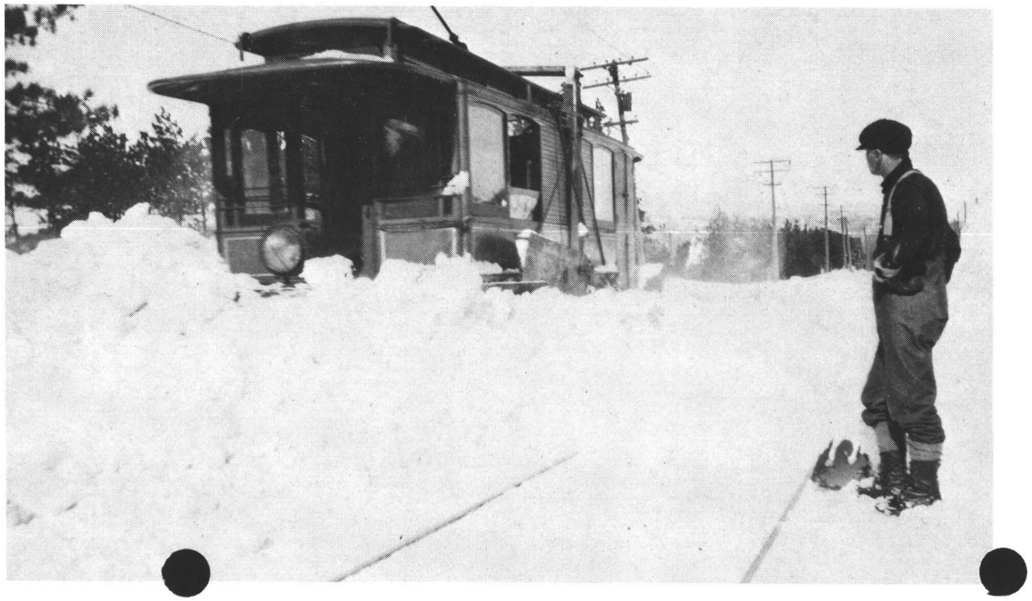
(All photographs DSR; Wayne C. Olsen collection)

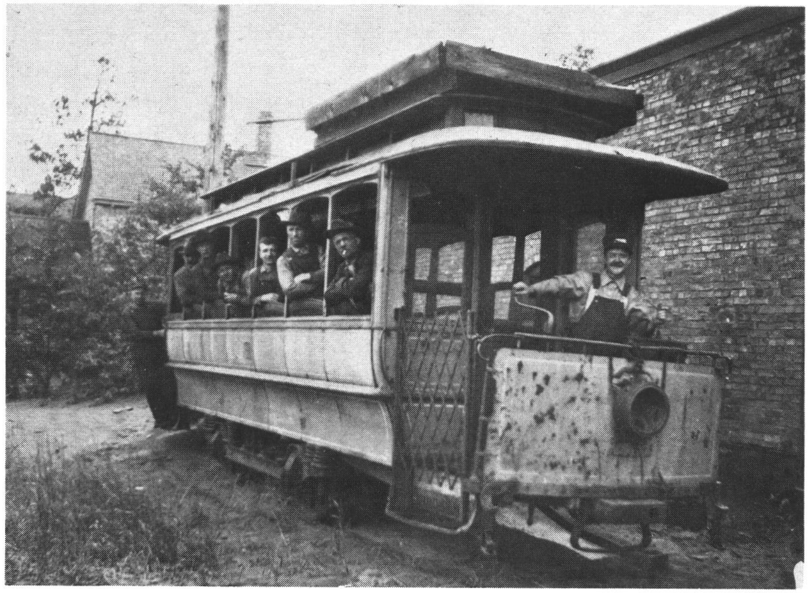



PARK POINT
285

Above: DSR 285, formerly PPTC 10, at the Duluth carhouse April 24, 1930, after being upgraded for service over the Aerial Bridge.

Below: PPTC Snow Plow 12 which became DSR 5/147.

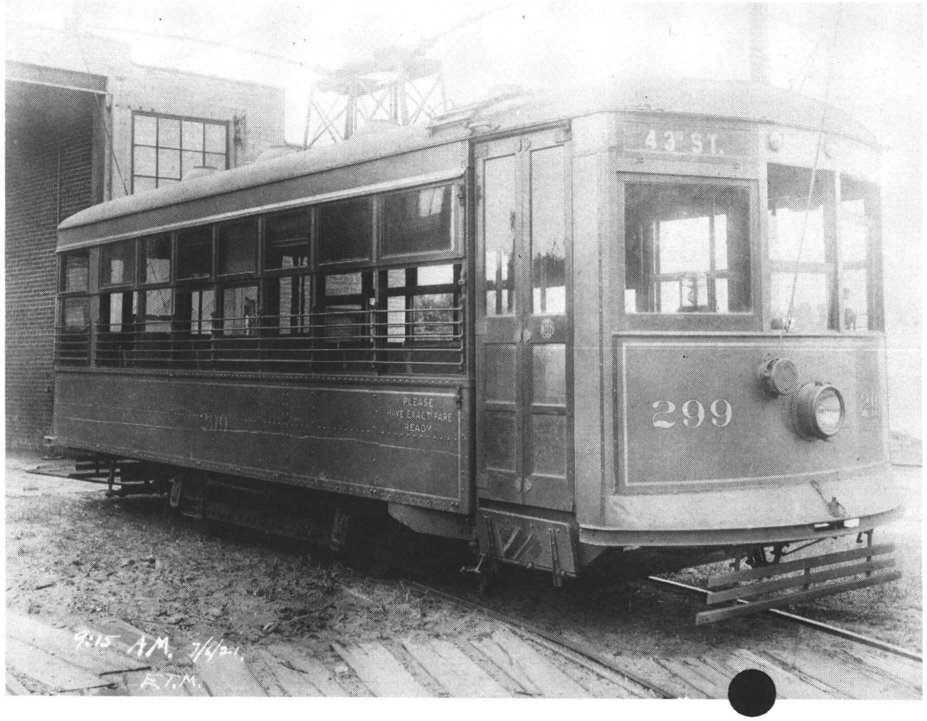




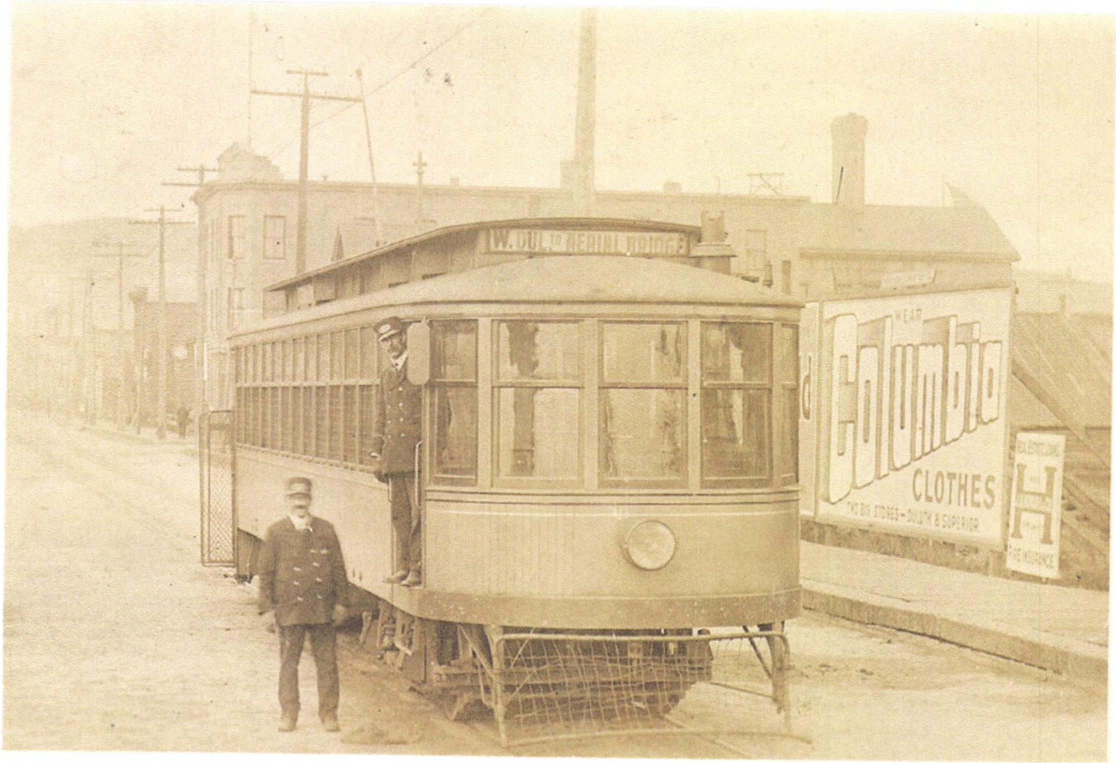
Above: PPTC Tower Car 13 on the storage track at the Park Point carhouse. It later became DSR 3/148.

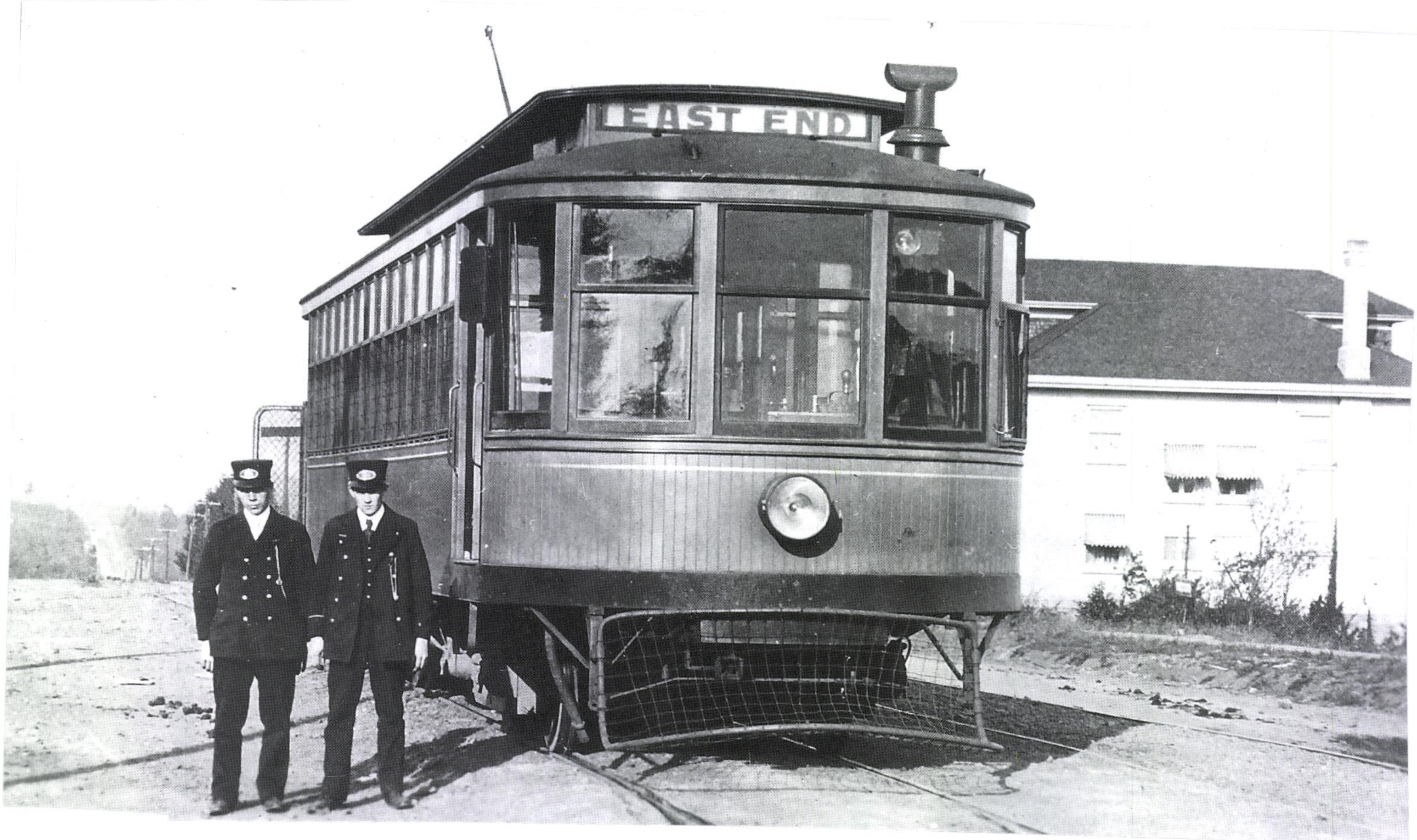
Below: Double end Birney car 299 at the Park Point carhouse July 6, 1921.

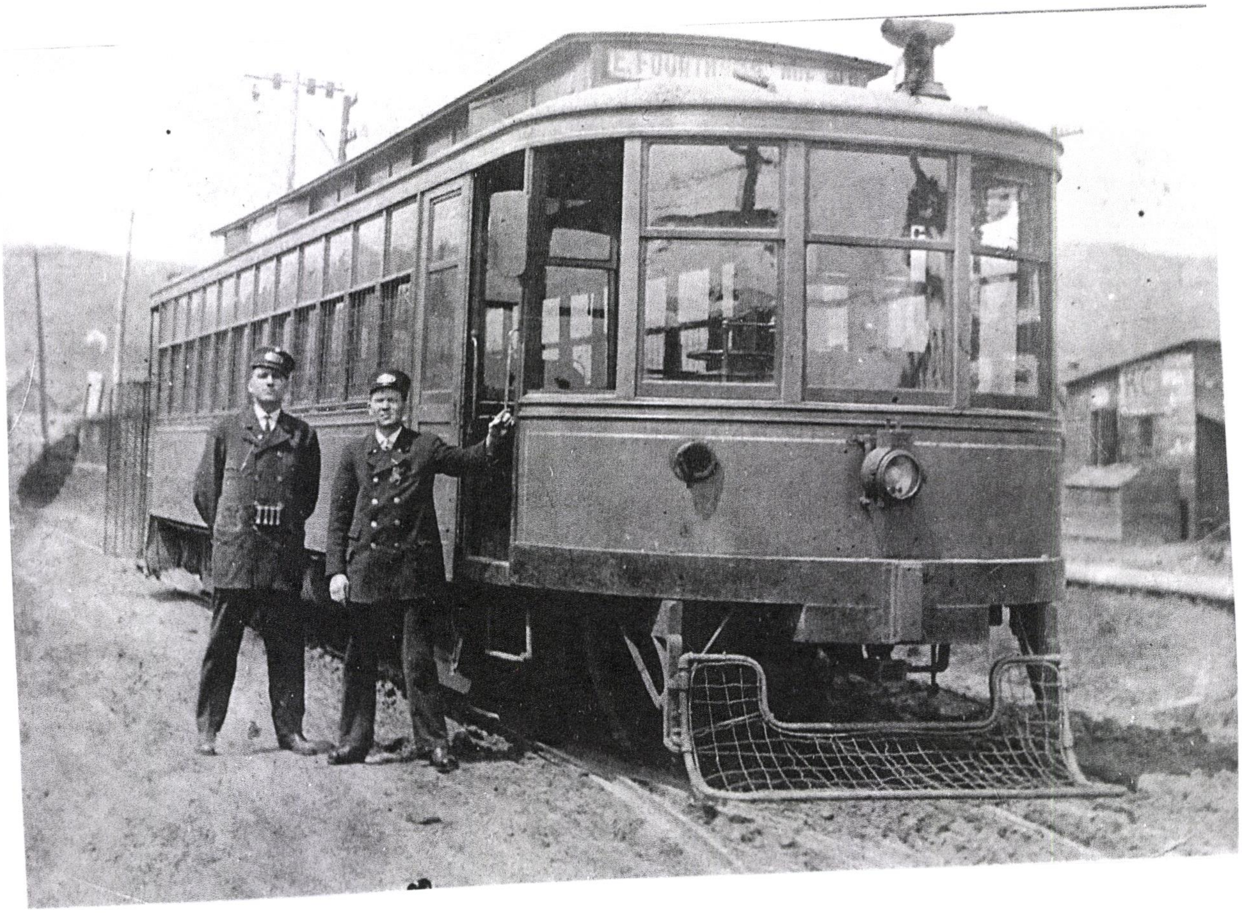
(All photographs Wayne C. Olsen collection)

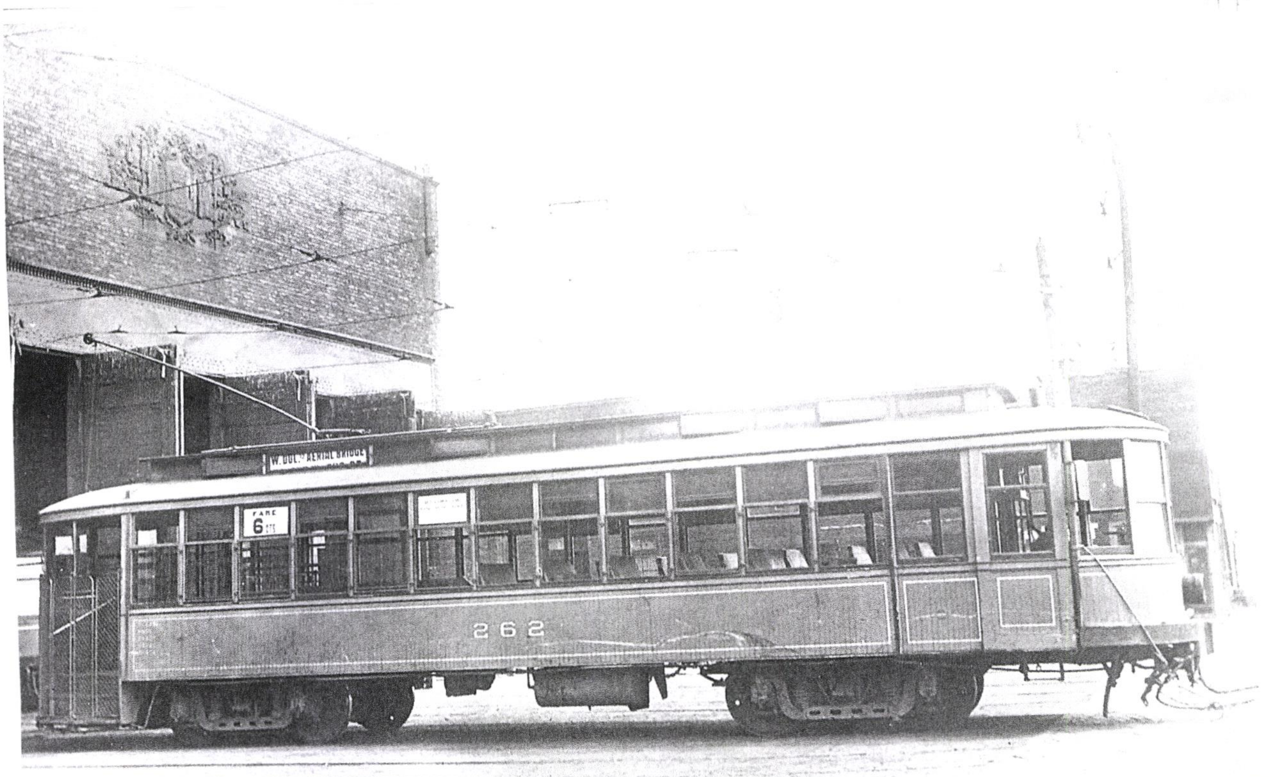

43 ST.
299
PLEASE HAVE EXACT FARE READY
9:15 A.M. 7/6/21.
E.T.M.

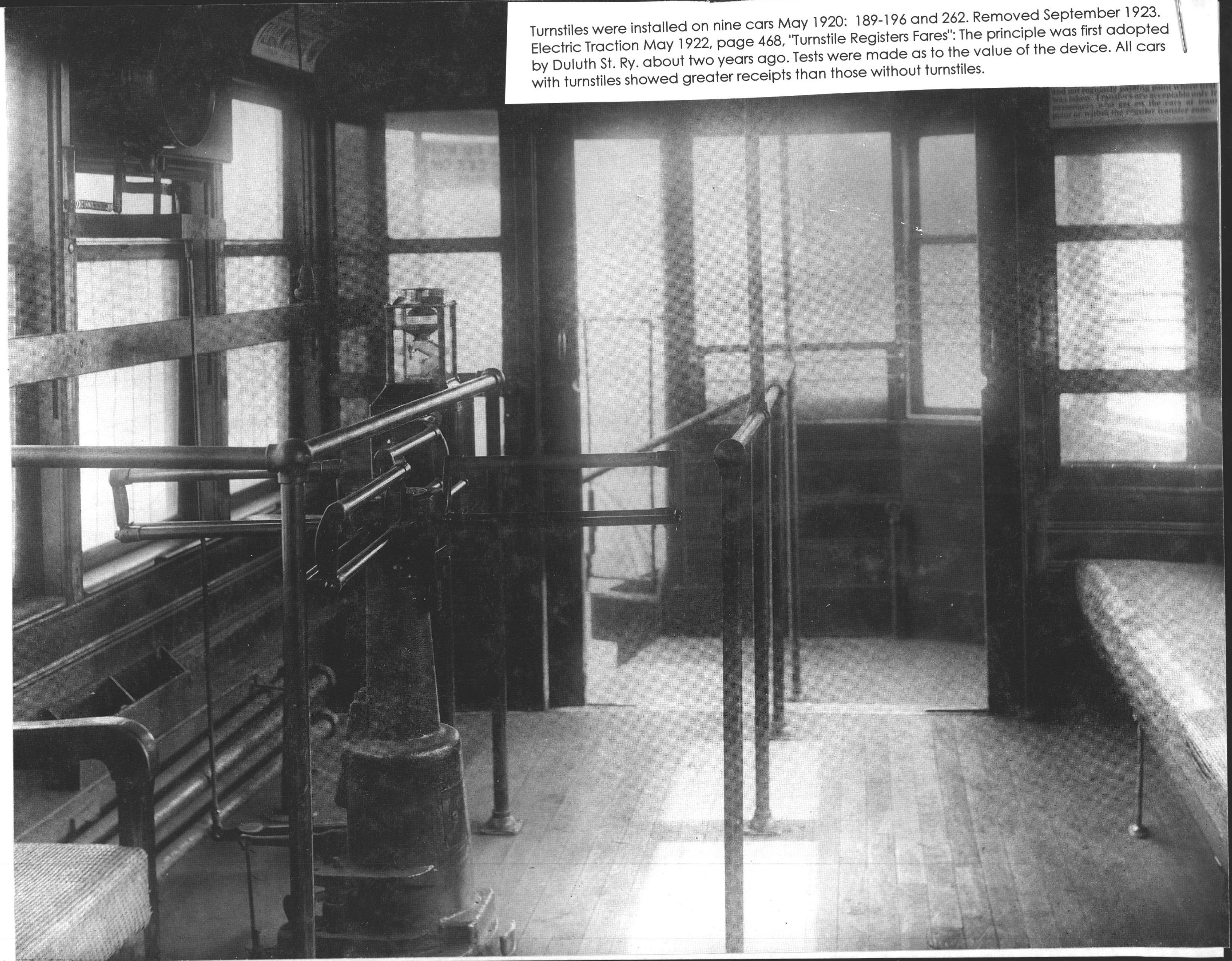
PV119ED
AVERY™


W. DUL. TO AERIAL BRIDGE
WEAR
Columbia
CLOTHES
THE BIG STORES—DULUTH & SUPERIOR
FIRE INSURANCE




E. FOURTH ST.


W. DUL. AERIAL BRIDGE
FARE 6 CTS
262

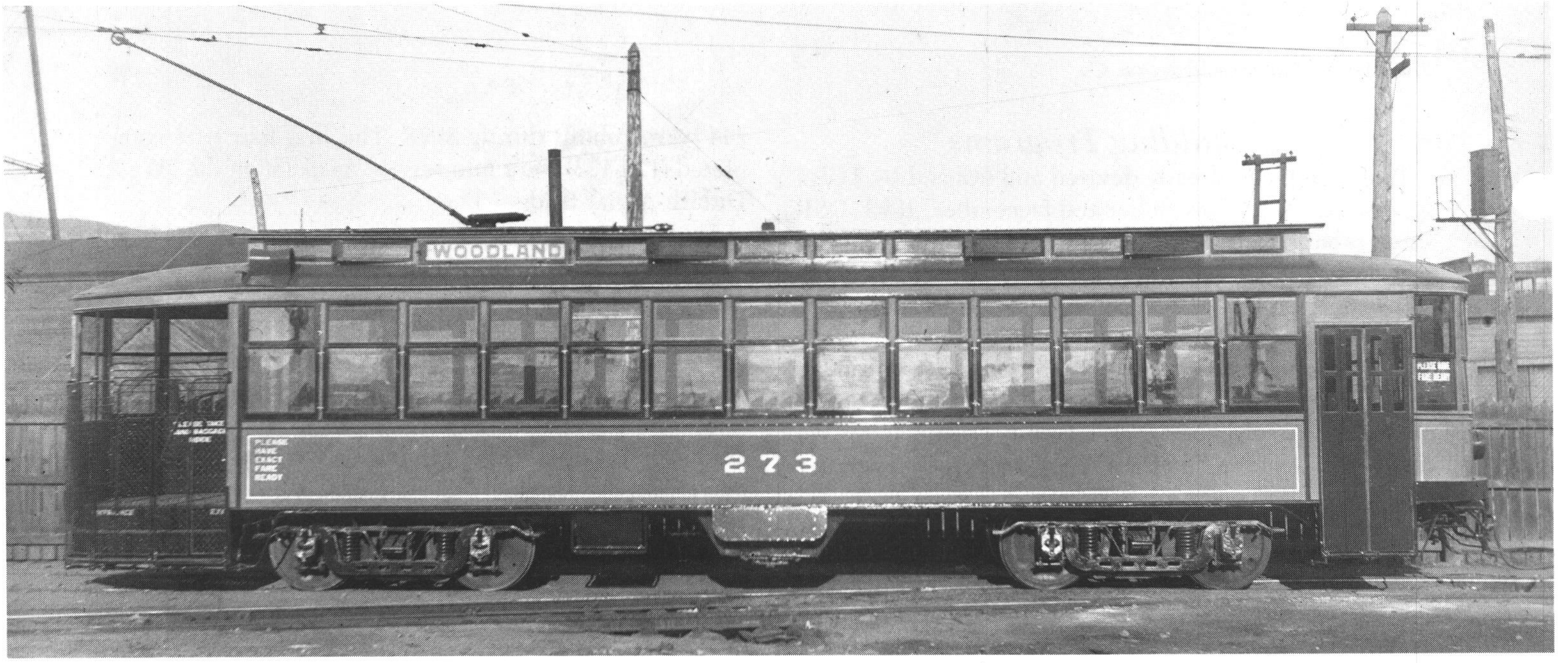


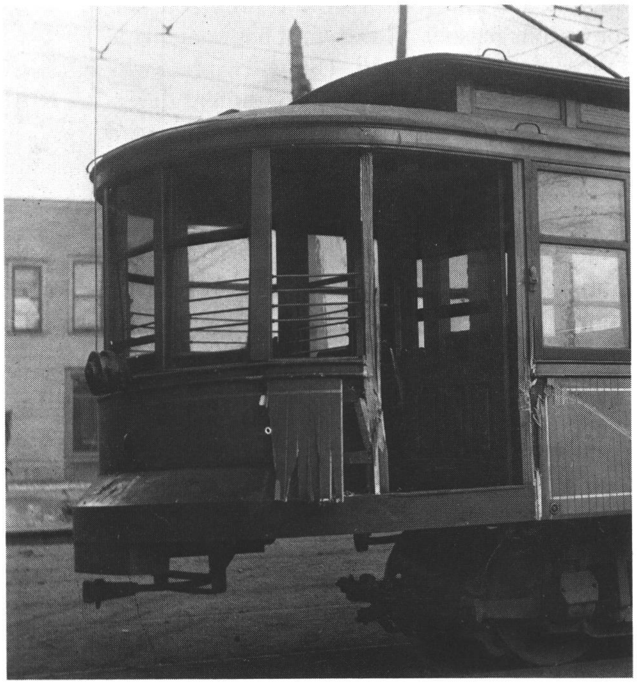
and not regularly passing point where first
was taken. Transfers are acceptable only
passengers who get on the cars at trans
point or within the regular transfer zone.

Turnstiles were installed on nine cars May 1920: 189-196 and 262. Removed September 1923. Electric Traction May 1922, page 468, "Turnstile Registers Fares": The principle was first adopted by Duluth St. Ry. about two years ago. Tests were made as to the value of the device. All cars with turnstiles showed greater receipts than those without turnstiles.

VITANOLA
TRANSFERS

POLY-VU AVERY™



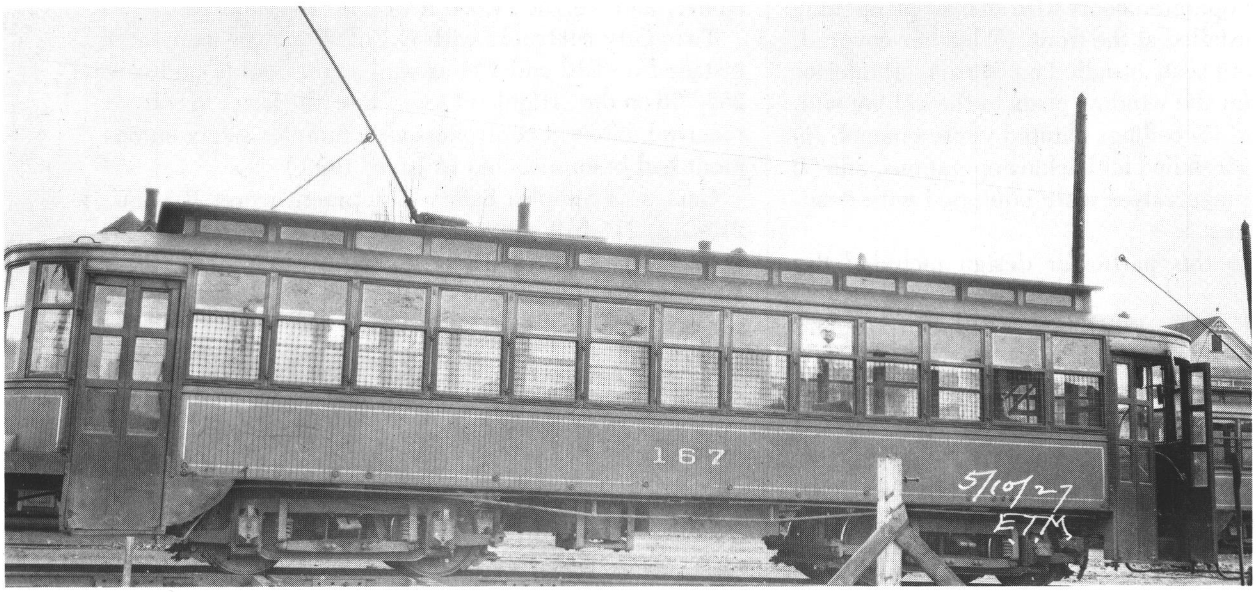


Above: Car 273 photographed October 31, 1923, after being rebuilt with front exit steps and folding doors.

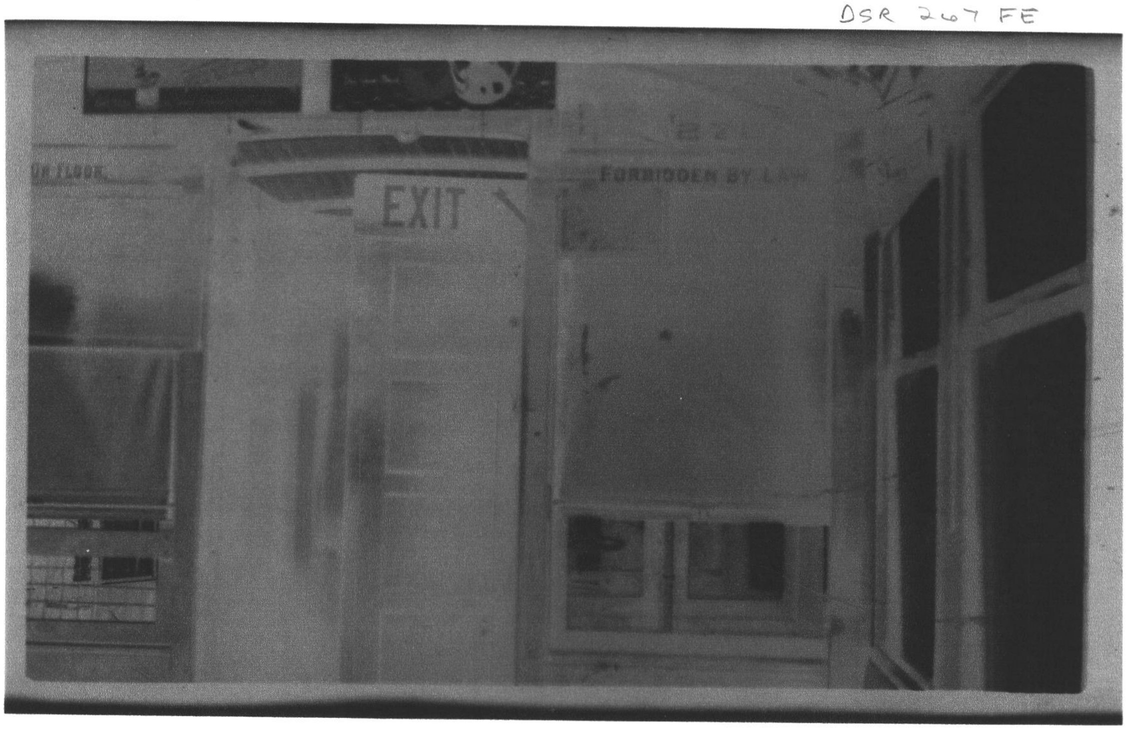
Center: Although this photograph was taken to show accident damage, it is the only one located so far that shows the hinged emergency exit door on the rear platform of a rebuilt one-man car. Car 166 was photographed on January 29, 1925.

Below: Car 167 as rebuilt for one-man operation with folding doors at the rear platform emergency exit. Taken May 10, 1927, in the west yard at the Duluth carhouse.

(All photographs DSR; Wayne C. Olsen collection)

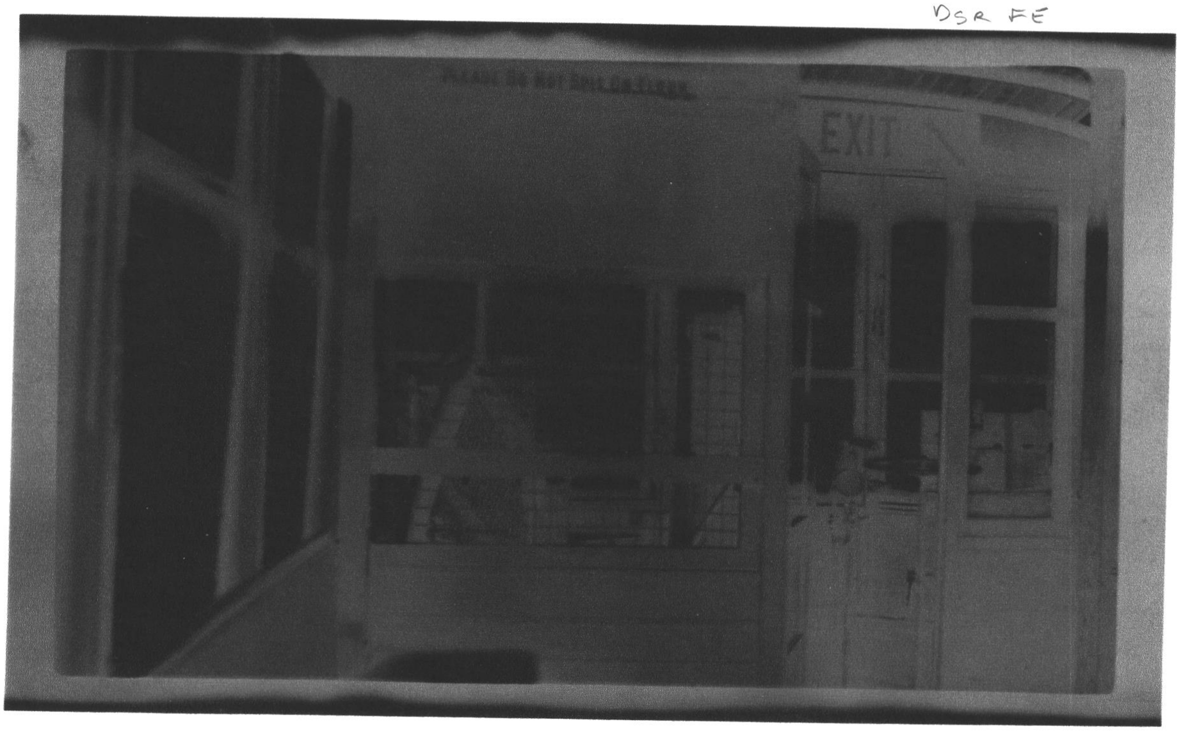


DSR 267 FE

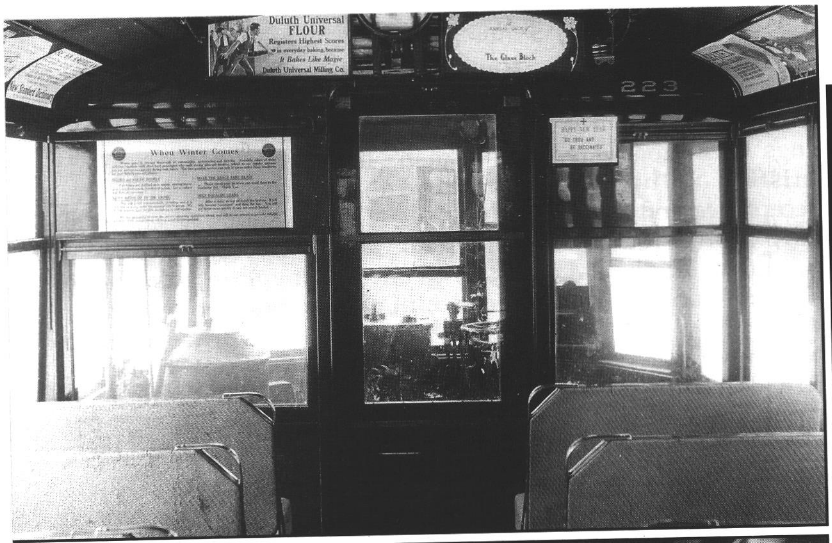


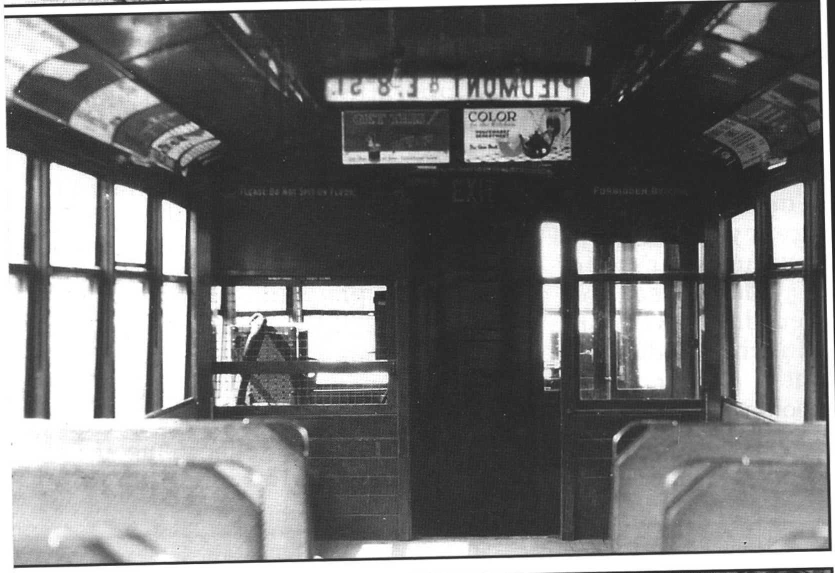
ON FLOOR
EXIT
FORBIDDEN BY LAW

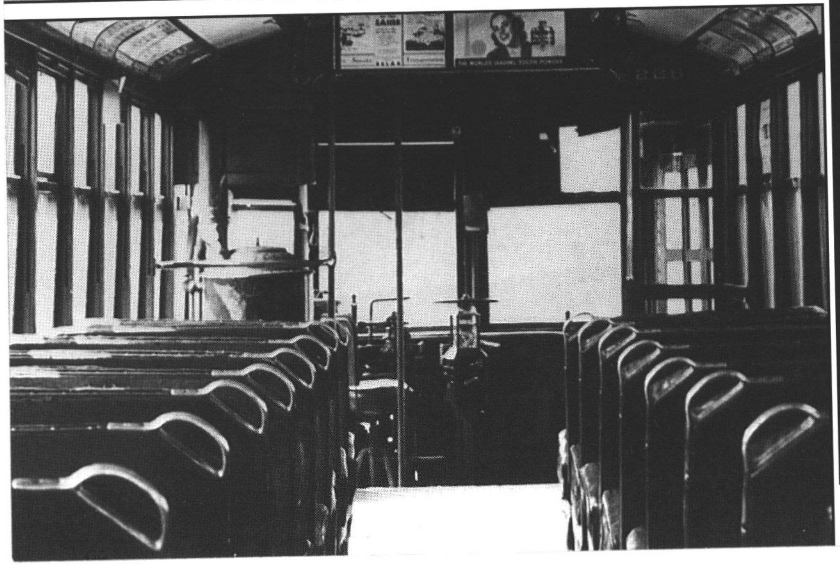
DSR FE



Please Do Not Spit On Floor
EXIT


Duluth Universal
FLOUR
Registers Highest Scores
in everyday baking, because
It Bakes Like Magic
Duluth Universal Milling Co.
The Glass Block
223
When Winter Comes

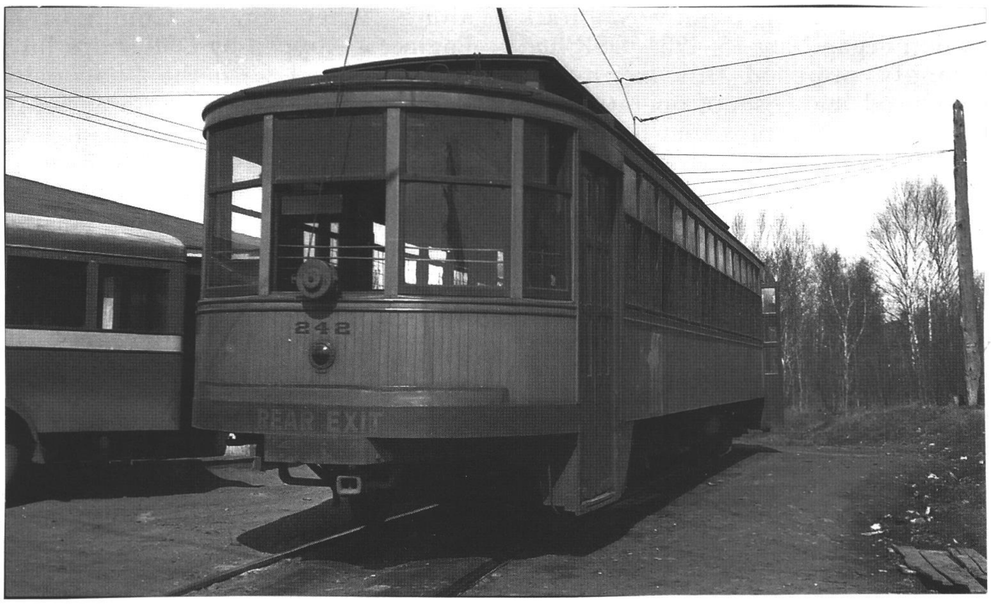

PIEDMONT & E. 8 St.
COLOR
PLEASE DO NOT SPIT ON FLOOR
EXIT

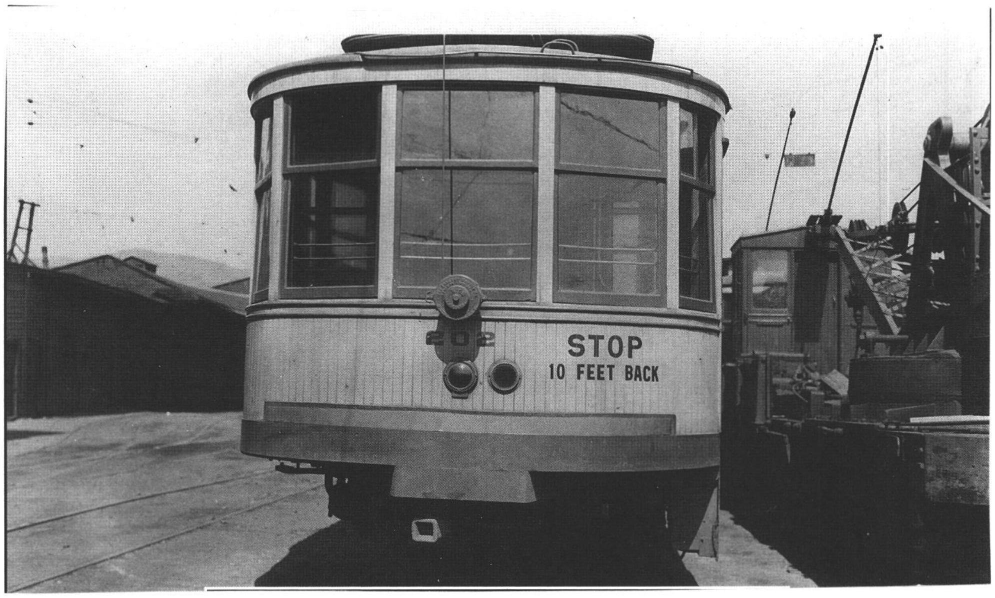


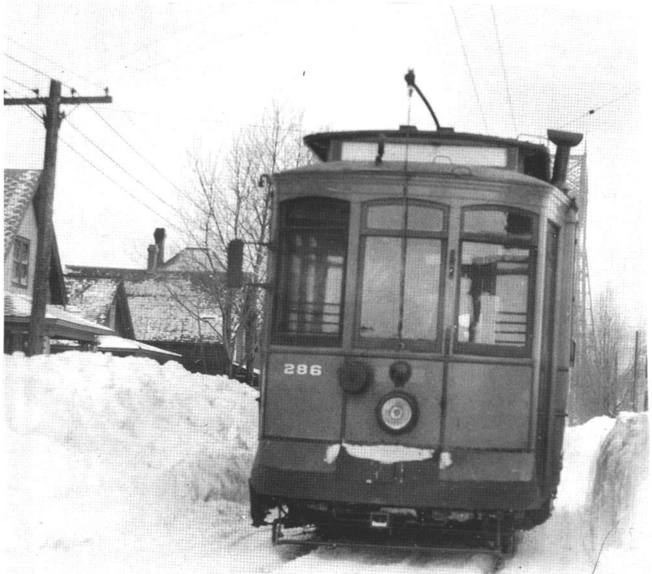
Top: As built, the motorman's compartment of Duluth standard cars was isolated from the passengers behind a front bulkhead and closed door.

Middle: Front exit doors were added to some two-man cars to reduce congestion on the rear platform. Note the EXIT sign. Part of the bulkhead was moved forward into the front platform to accommodate the exit. Longitudinal (aisle-facing) seats were added.

Bottom: The conversion to one-man operation added the double front entrance doors and farebox and removed most of the front bulkhead. Numerous cars also received new leather-upholstered seats.

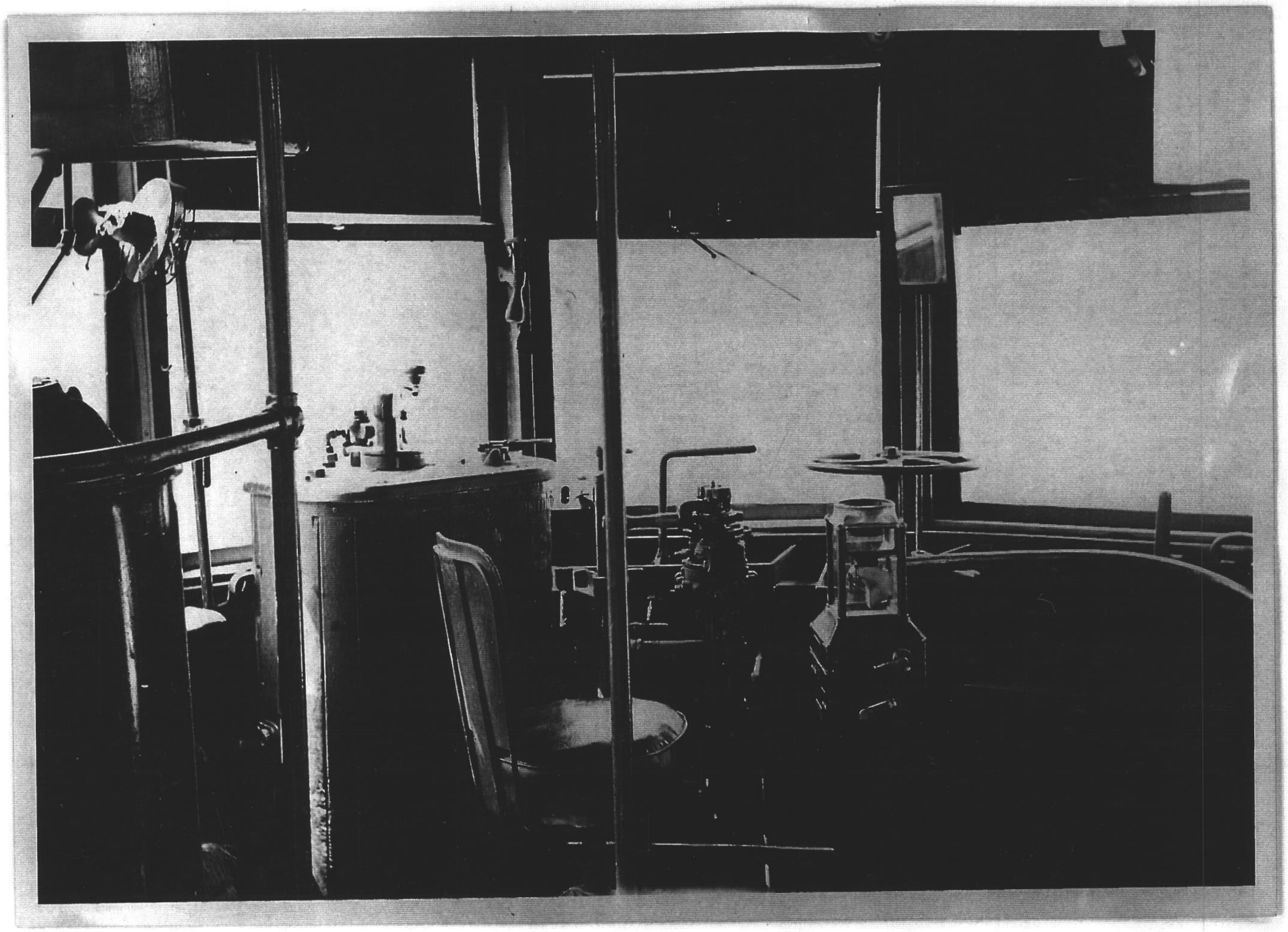

242
REAR EXIT


202
STOP
10 FEET BACK


286

Russ

AVERY® POLYVU

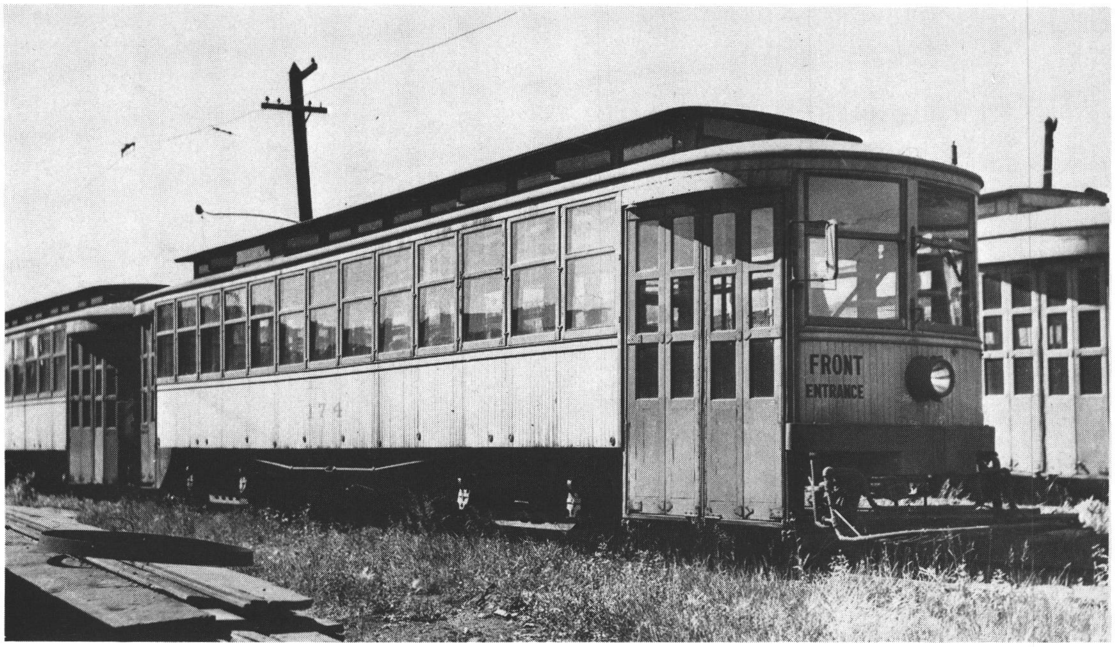


DSR 226

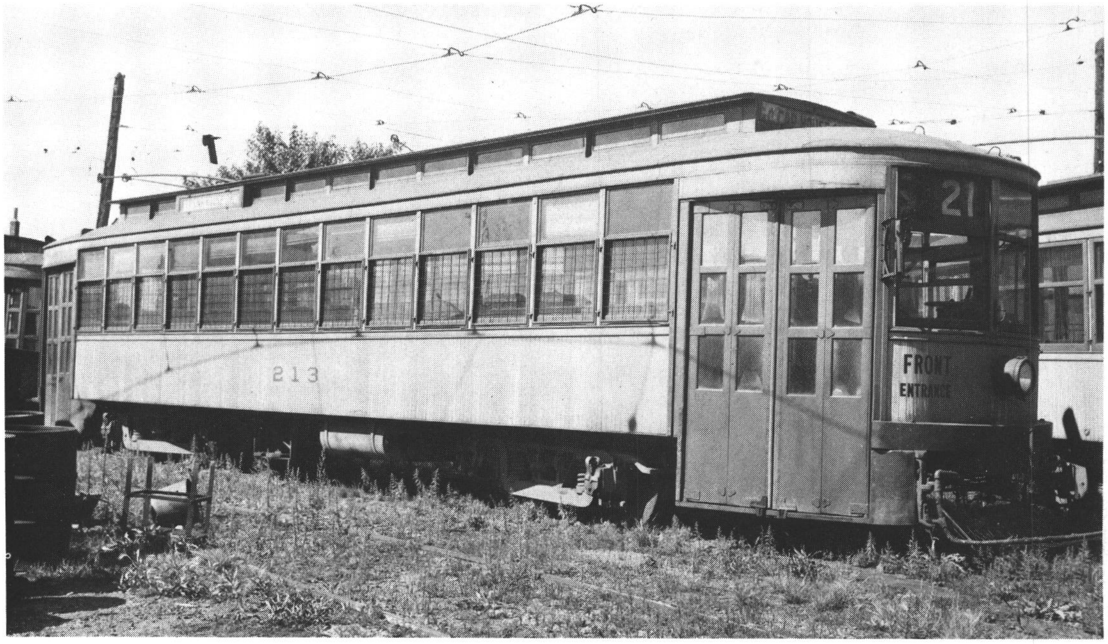
July 6 1931

DSR 218

8 July 1930

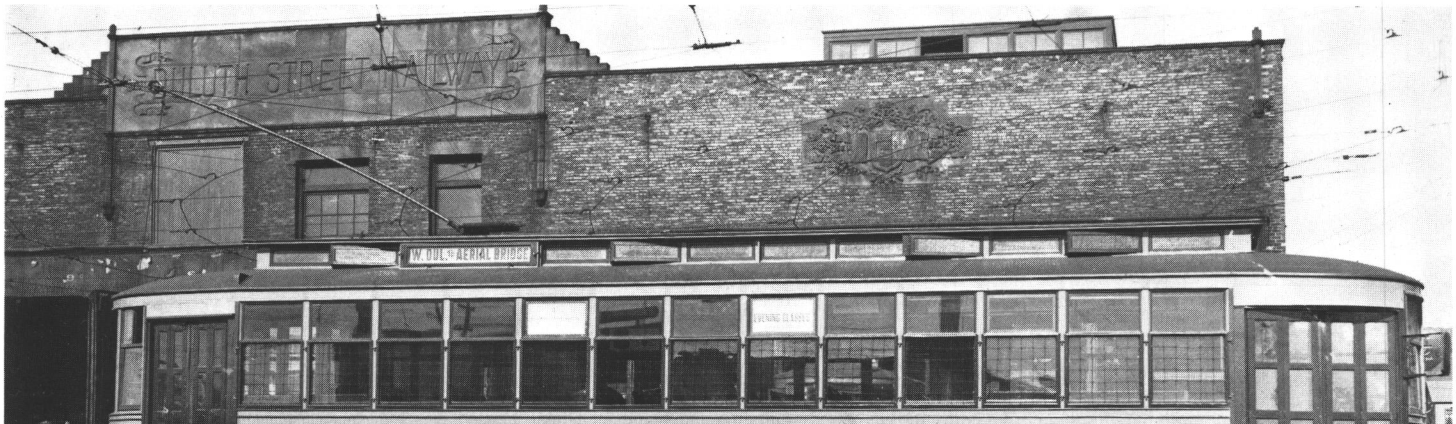

174
FRONT
ENTRANCE

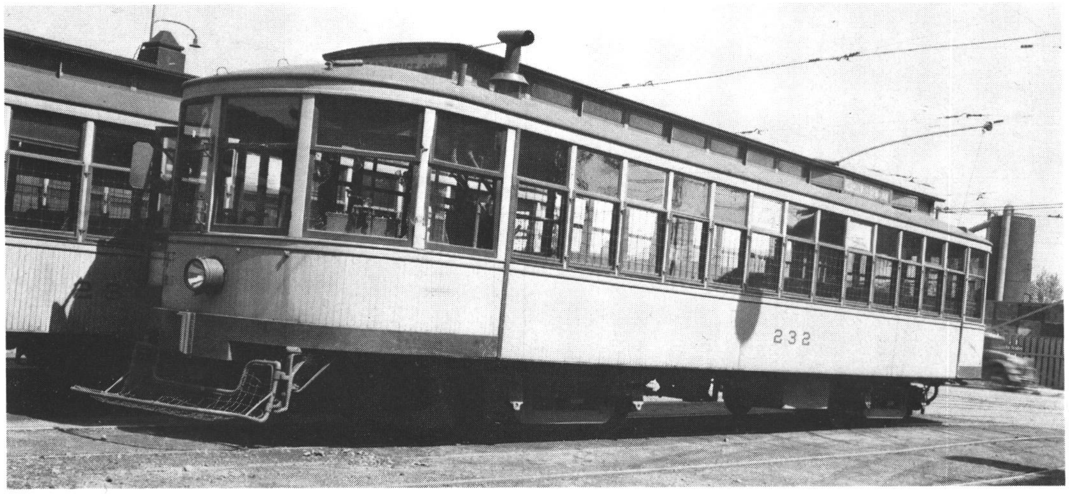
Above: Rebuilt one-man car 174 as it appeared toward the end of its useful life in 1938. (Stephen D. Maguire)

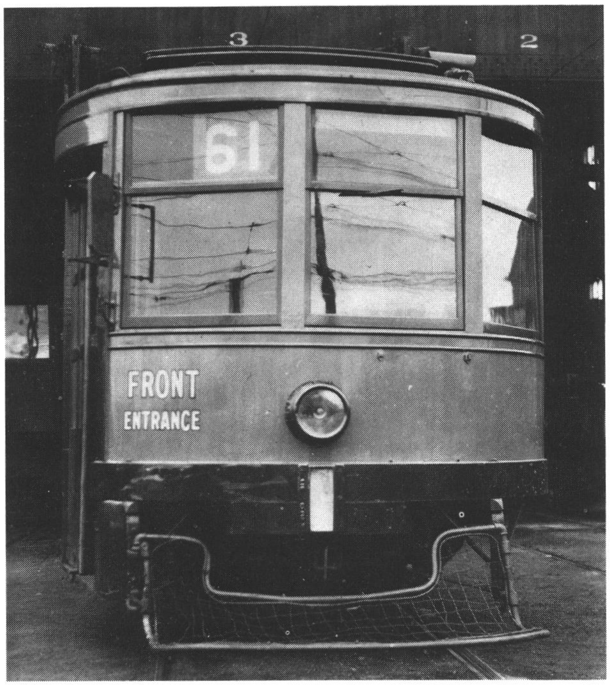

21
213
FRONT
ENTRANCE

Center: Rebuilt one-man car 213 in 1937. (Robert M. Hanft)

Below: "Gate side" of rebuilt one-man car 266 on the ladder track in front of the Duluth carhouse. (Joe Hutchinson collection)


DULUTH STREET RAILWAY
W. DUL. to AERIAL BRIDGE
266



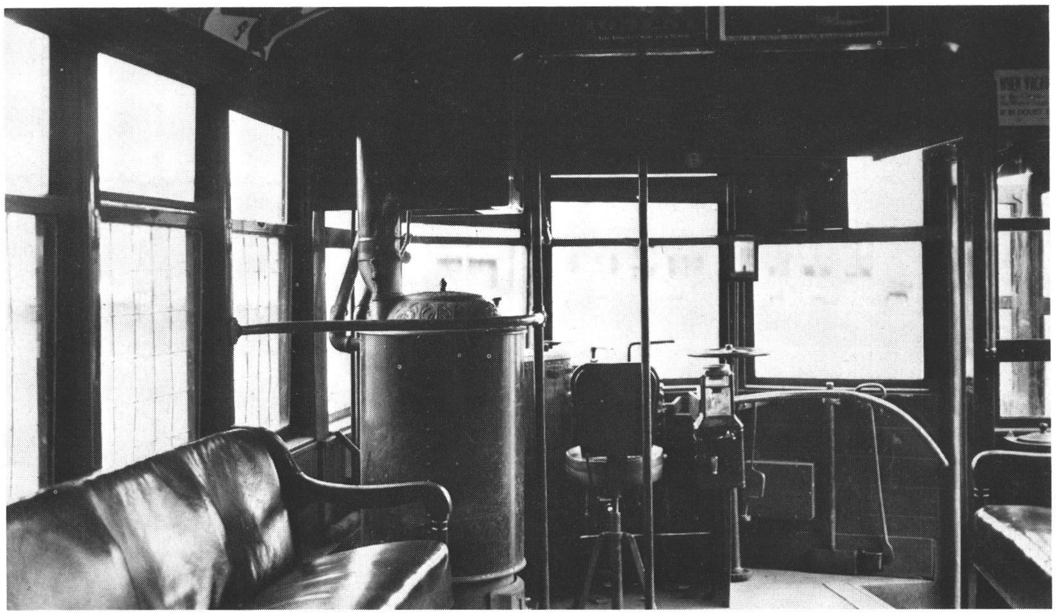


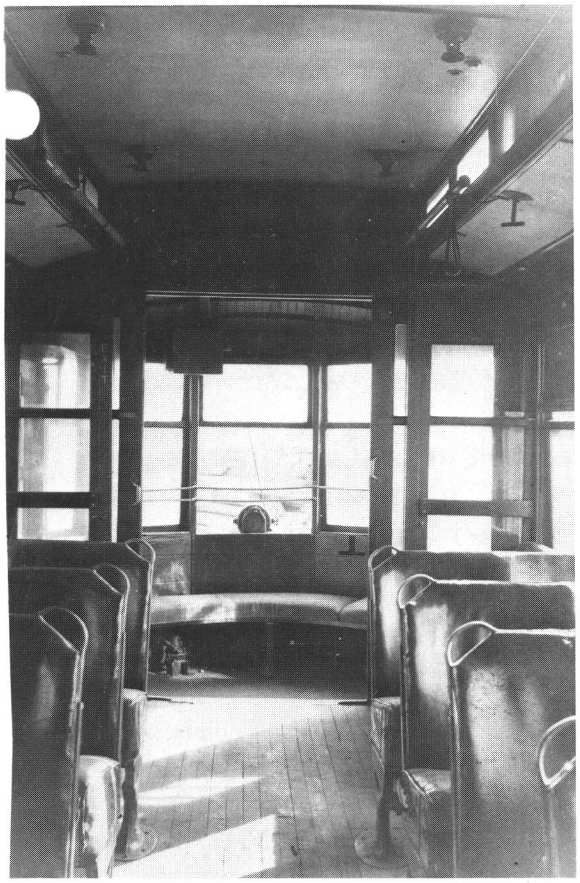
Above: "Pole side" of rebuilt one-man car 232 which shows the complete unusual window arrangement on the front platform.

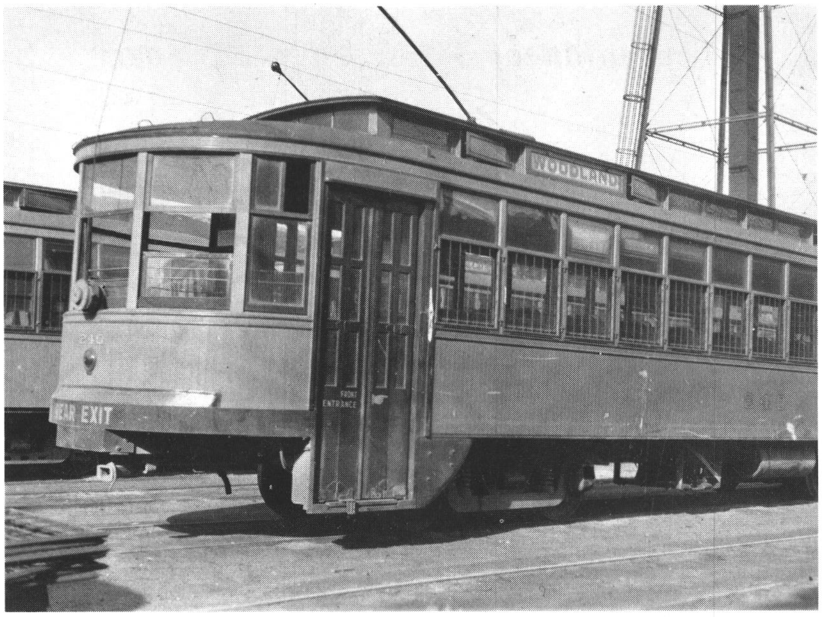
Center: Head-on view of rebuilt one-man car 246 which more forcefully shows the off-center window design.

Below: Interior view of the front platform of a rebuilt one-man car which persuasively demonstrates that the entire front platform must have been designed solely with the interior layout in mind. Note the leather cushion seats.

(All photographs DSR; Wayne C. Olsen collection)





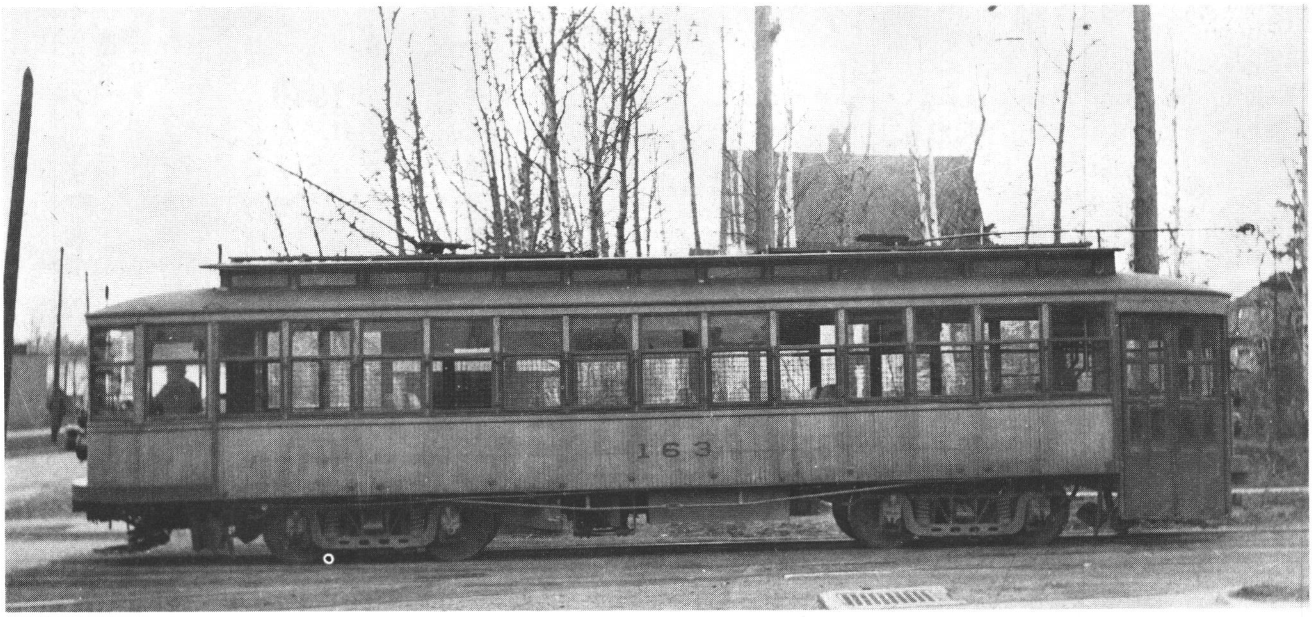


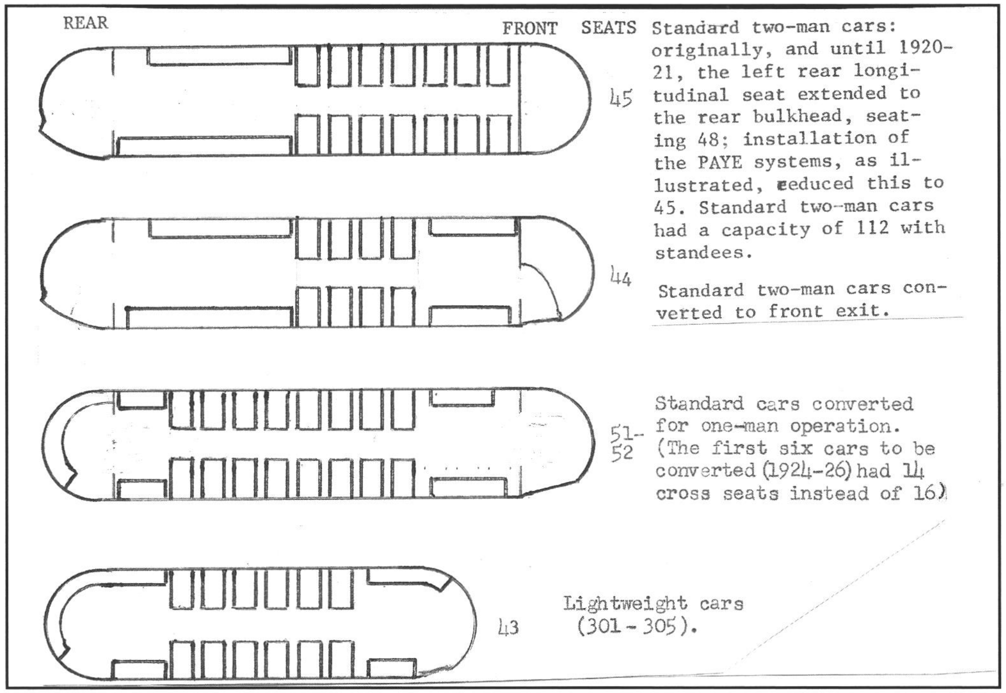
Above right: Rear platform of rebuilt one-man car 240 showing the rear door arrangement on those cars that had treadle steps for use as a rear passenger exit.

Above left: Interior view of the rear platform of a rebuilt one-man car showing the platform seat cushions and the backing-up controls. Note the rear bulkhead doors were retained.

Below: One-man car 163 rebuilt for double end operation on the "Crosley Ave." line.

(All photographs DSR; Wayne C. Olsen collection)





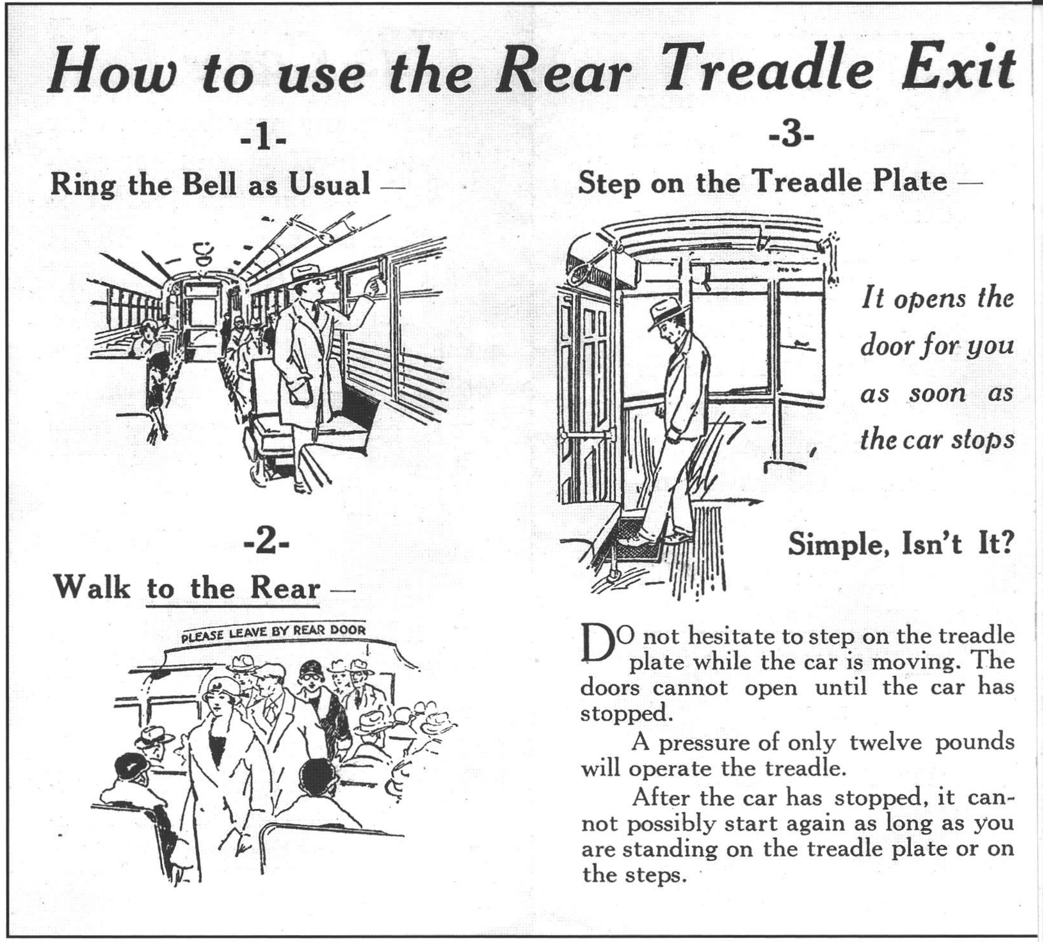
Standard two-man cars: originally, and until 1920-21, the left rear longitudinal seat extended to the rear bulkhead, seating 48; installation of the PAYE systems, as illustrated, reduced this to 45. Standard two-man cars had a capacity of 112 with standees.

Standard two-man cars converted to front exit.

Standard cars converted for one-man operation. (The first six cars to be converted (1924-26) had 14 cross seats instead of 16)

Lightweight cars (301 - 305).

Above: Jim Kreuzberger made this drawing showing how the seating arrangements evolved as the streetcars were rebuilt.
Below: Commercially produced Heywood Wakefield leather upholstered seats replaced the rattan TCRT originals in most of the rebuilt cars.
Above right: This pamphlet told riders how to use the new rear exit step treadles.
Below right: Looking down at the step treadles.



How to use the Rear Treadle Exit

-1-

Ring the Bell as Usual —

-2-

Walk to the Rear —

PLEASE LEAVE BY REAR DOOR

-3-

Step on the Treadle Plate —

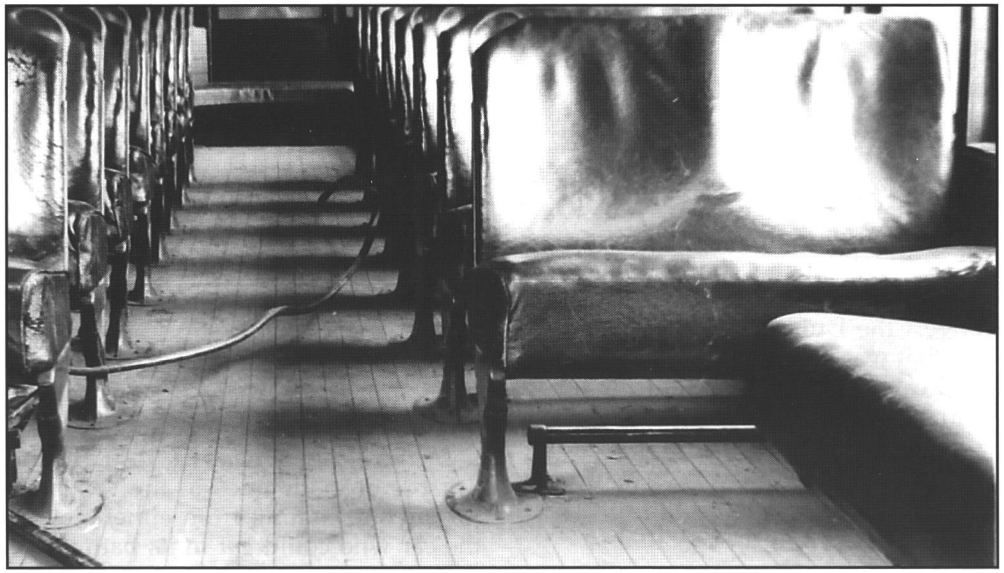
It opens the door for you as soon as the car stops

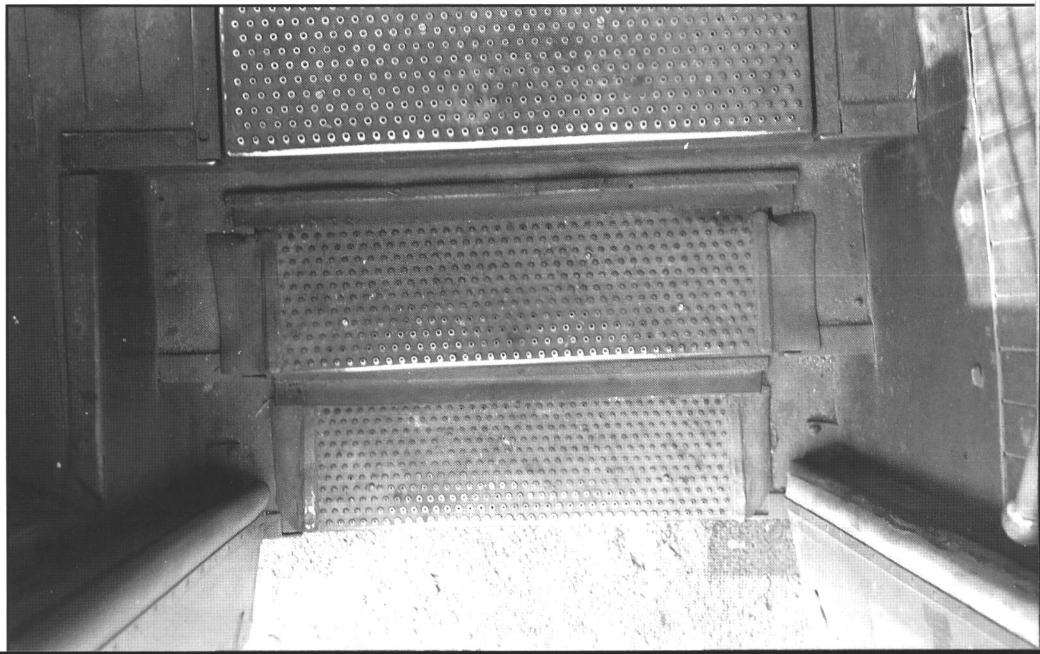
Simple, Isn't It?

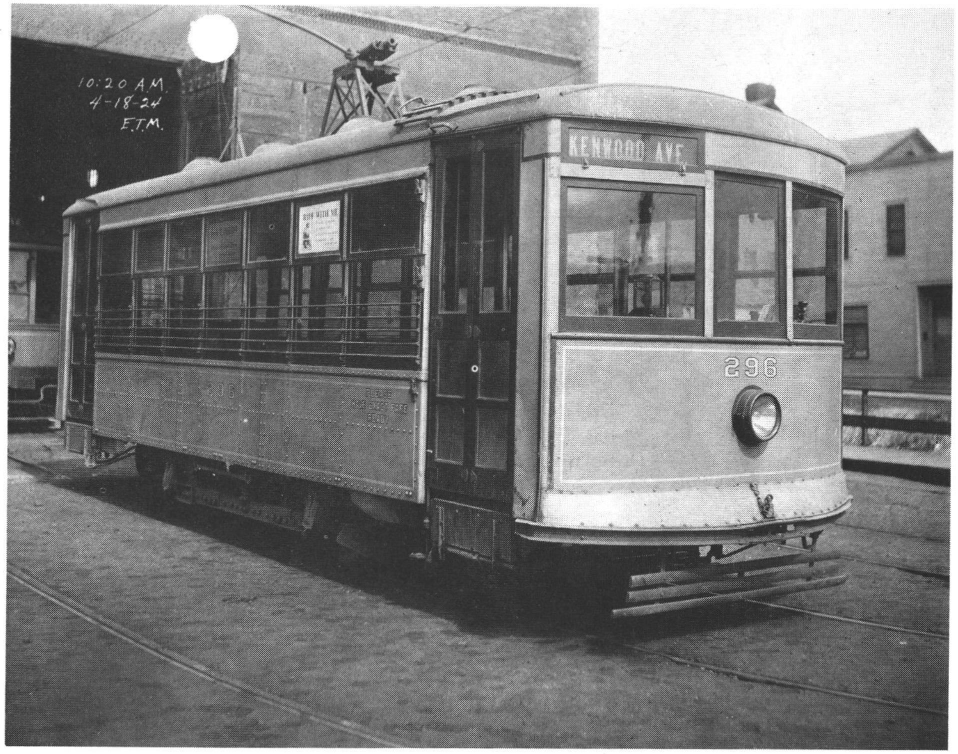
Do not hesitate to step on the treadle plate while the car is moving. The doors cannot open until the car has stopped.

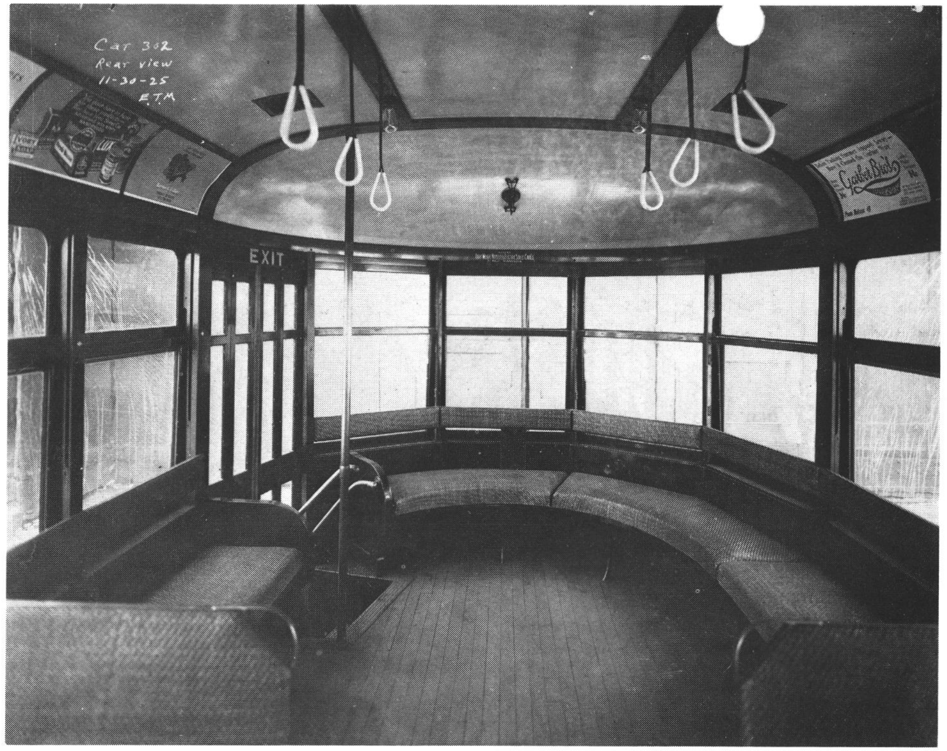
A pressure of only twelve pounds will operate the treadle.

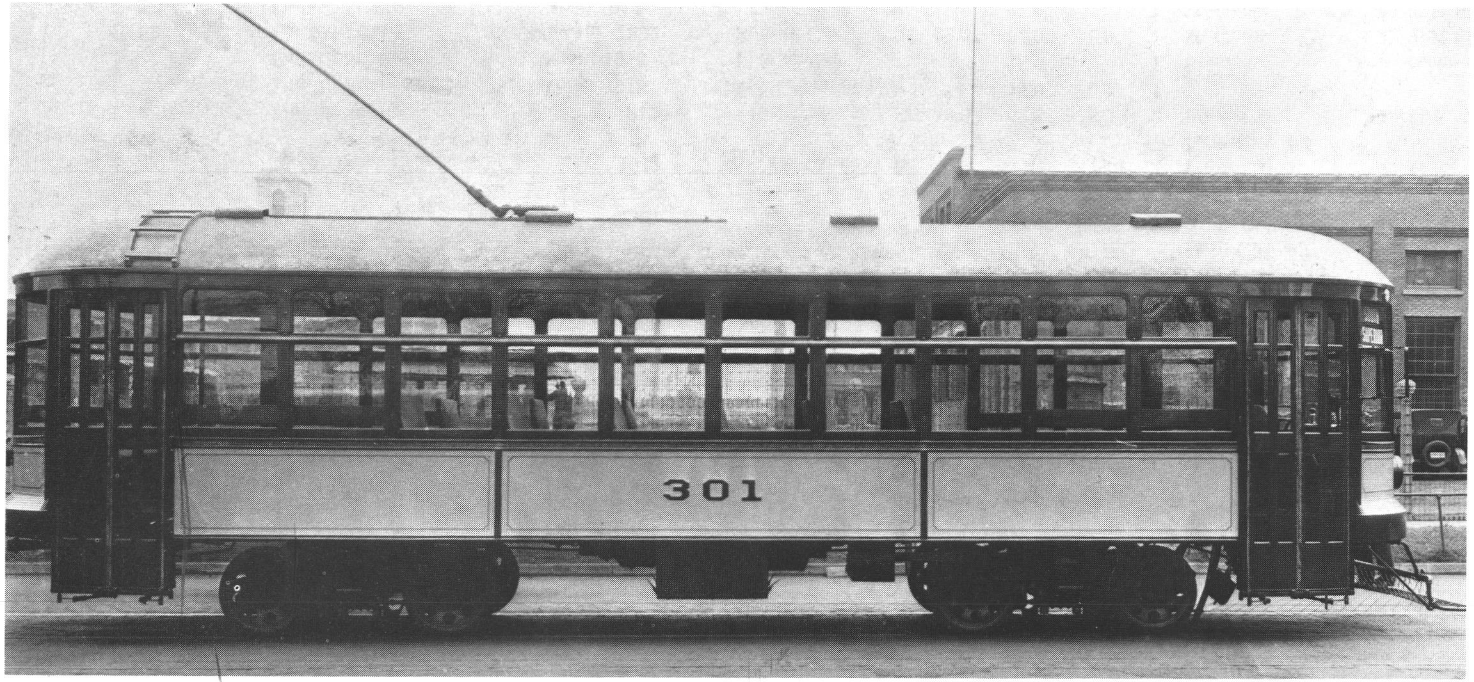
After the car has stopped, it cannot possibly start again as long as you are standing on the treadle plate or on the steps.






10:20 A.M.
4-18-24
E.T.M.
KENWOOD AVE.
296


Car 302
Rear view
11-30-25
E.T.M.
EXIT

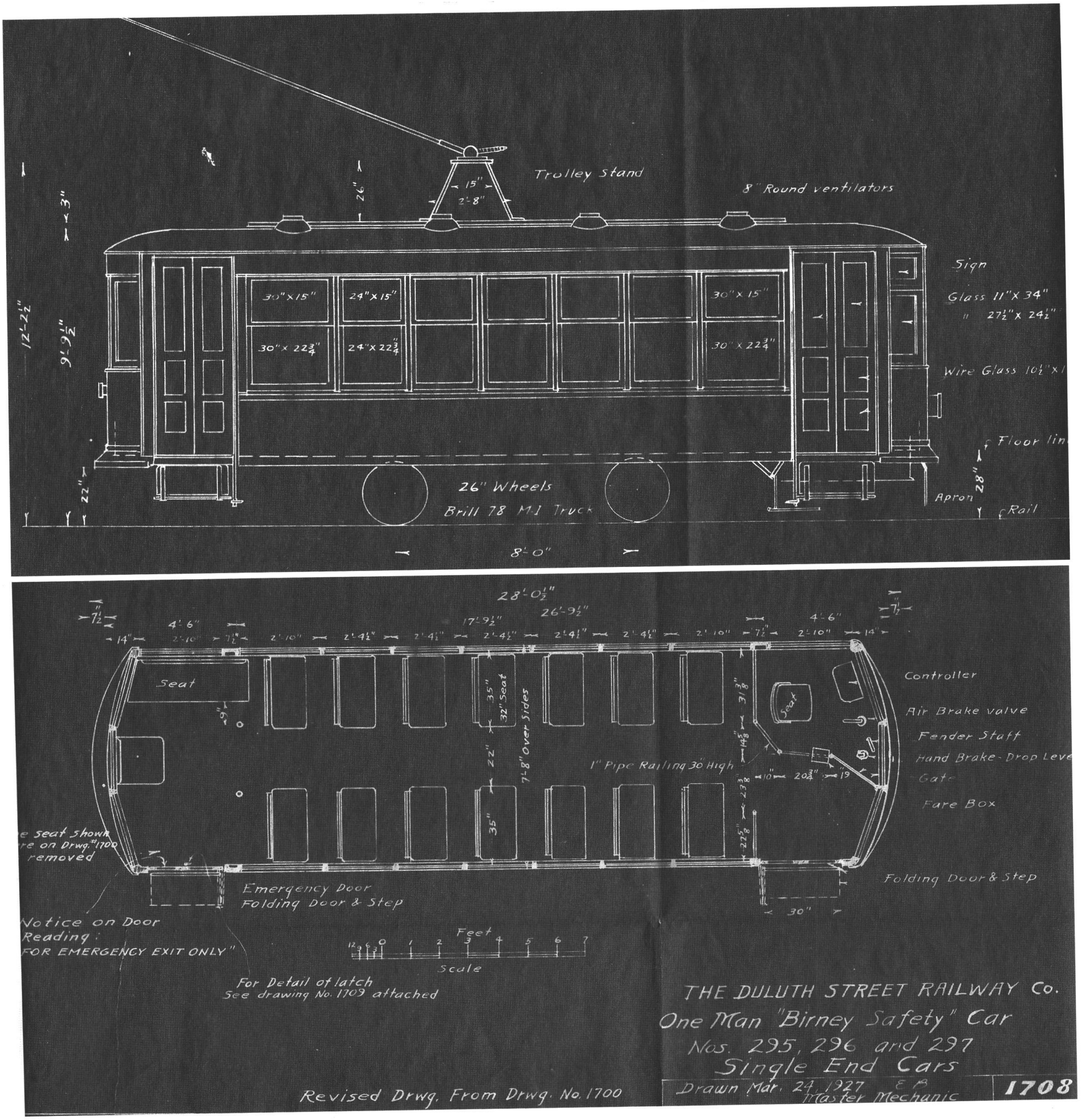


Above left: Single end Birney car 296 at the Duluth carhouse April 18, 1924.

Above right: Rear view of the interior of car 302 showing the rear platform seating arrangement.

(Both photographs DSR; Wayne C. Olsen collection)

Below left: Builder's photograph of car 301 at the Snelling Shops, St. Paul (southbound on Snelling Ave.), 1925. (TCRT)

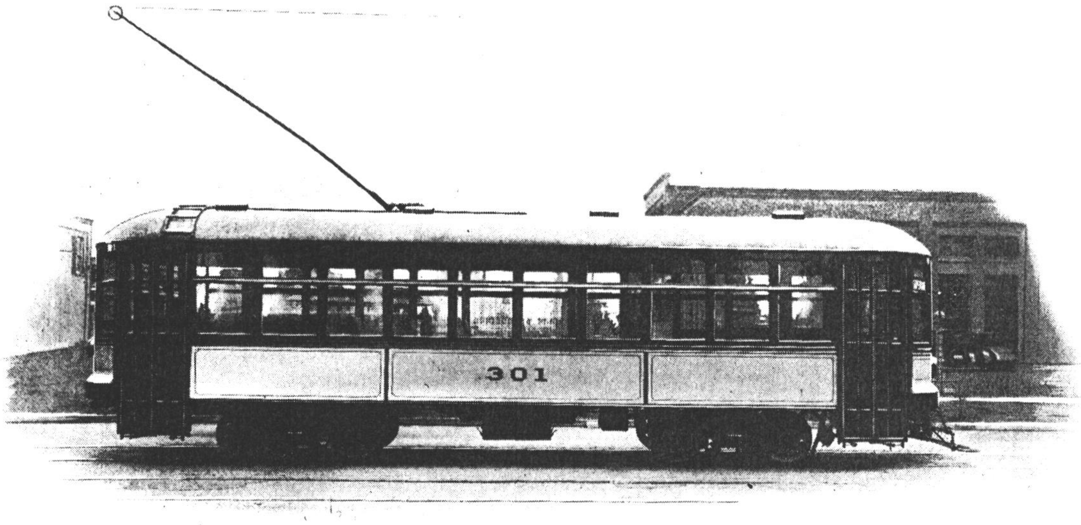

Trolley Stand
15"
2'-8"
26"
8" Round ventilators
3"
12'-2½"
9'9½"
30"x15"
24"x15"
30"x15"
30"x22¾"
24"x22¾"
30"x22¾"
Sign
Glass 11"x34"
" 27½"x24½"
Wire Glass 10½"x1
Floor lin
22"
26" Wheels
Brill 78 M-1 Truck
28"
Apron
Rail
8'-0"
28'-0½"
26'-9½"
17'-9½"
7½"
4'-6"
14"
2'-10"
2'-4½"
Seat
9"
35"
32" Seat
22"
7'-8" Over Sides
35"
31⅜"
14⅜"
1" Pipe Railing 30" High
23⅜"
22⅝"
10"
20¾"
19
Seat
Controller
Air Brake valve
Fender Staff
Hand Brake - Drop Leve
Gate
Fare Box
e seat shown
re on Drwg. #1700
removed
Emergency Door
Folding Door & Step
Folding Door & Step
30"
Notice on Door
Reading:
"FOR EMERGENCY EXIT ONLY"
Feet
12 9 6 3 0 1 2 3 4 5 6 7
Scale
For Detail of latch
See drawing No. 1709 attached

THE DULUTH STREET RAILWAY Co.
One Man "Birney Safety" Car
Nos. 295, 296 and 297
Single End Cars

Revised Drwg. From Drwg. No. 1700

Drawn Mar. 24, 1927 E.B. Master Mechanic

1708

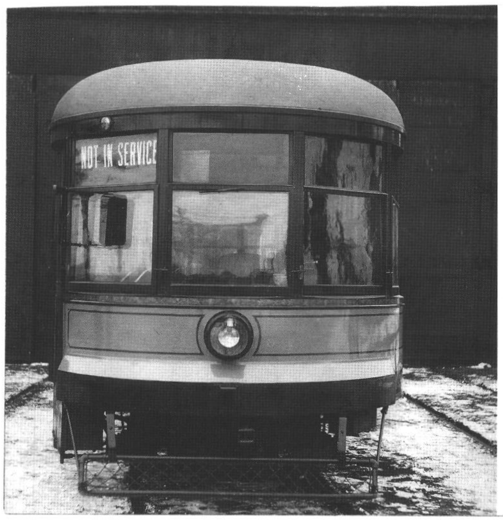


Duluth Street Railway

Duluth, Minn.

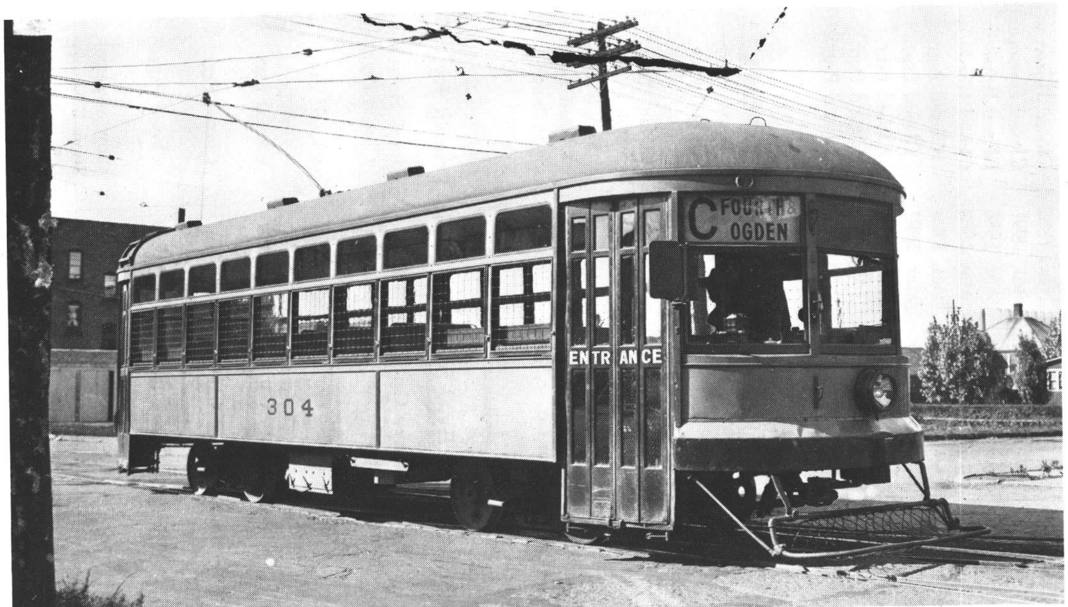
THIS company operates all of the street railway lines in Duluth and Superior as well as several suburbs. It has a total of 109 miles of track, 54 miles of which are on paved streets. There are now in operation 143 motor, passenger cars of which the newer types are one-man, double-truck and weigh approximately 12 tons each. Each car is equipped with four GE-258, 25-h.p. motors and single-end, Type K-35 control.

The weight of these cars per passenger seat shows a reduction over the old cars of from 1000 to 570 pounds. The power consumed is approximately 50 per cent of that used by the older cars. The new cars are much quieter in operation. Five of these new cars are now in operation over a comparatively level profile. A schedule speed is maintained of 11.7 miles per hour with five stops per mile, having an average duration of 6 seconds each. A headway of 20 minutes is operated with these cars. Up to the beginning of 1926, the new equipment had operated 205,000 car miles. The kw-hr. per car mile consumption is 1.8 compared with 3.6 for the old cars.



Car 302
11-30-25
E.T.M.
302

11-30-25
ETM.
302


C
FOURTH &
OGDEN
ENTRANCE
304

Car 304 pulling in the Superior carhouse on 4th St. at Ogden Ave. The destination sign is a combination of the two separate systems worked out for the lightweight cars. The Birney cars also had a separate destination sign roll system. (Wayne C. Olsen collection)

DIMENSIONS

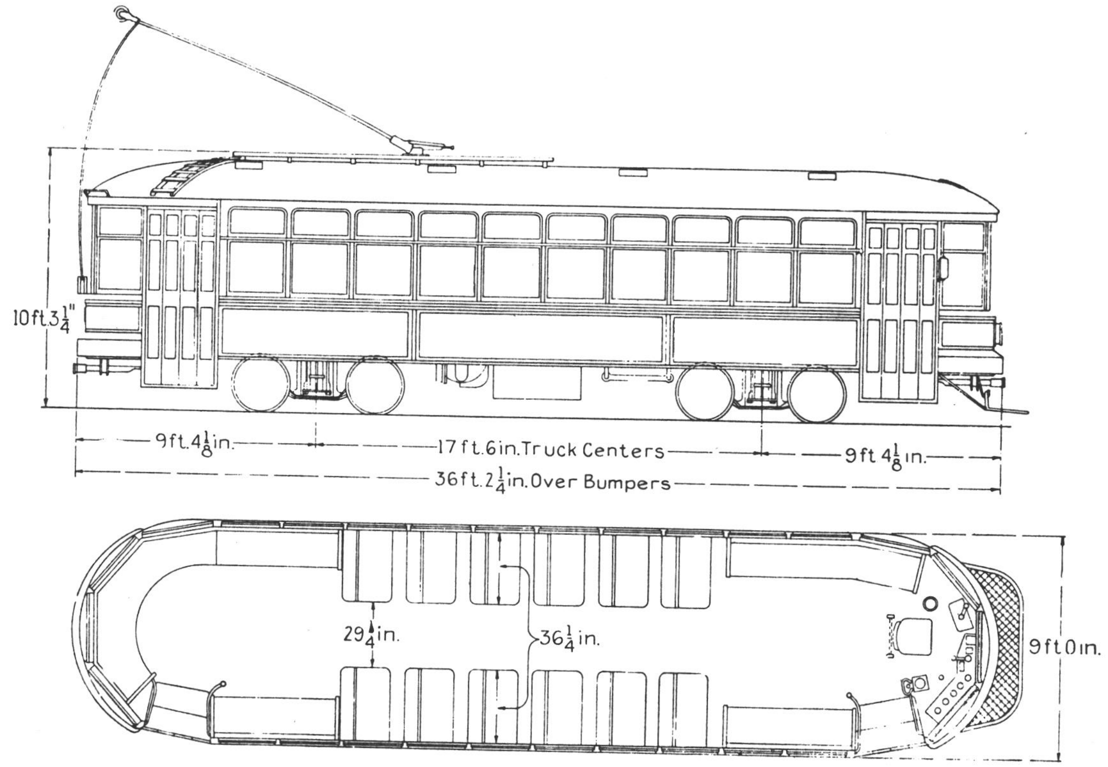
Length over bumpers	36 ft. 2¼ in.
Truck centers	17 ft. 6 in.
Wheel base	4 ft. 6 in.
Rail to step	13 in.
1st to 2nd step	9½ in.
2nd step to platform	9½ in.
Seating capacity	47
Width of seat	36 in.
Width of aisle	32½ in.
Diameter of wheels	26 in.

WEIGHTS

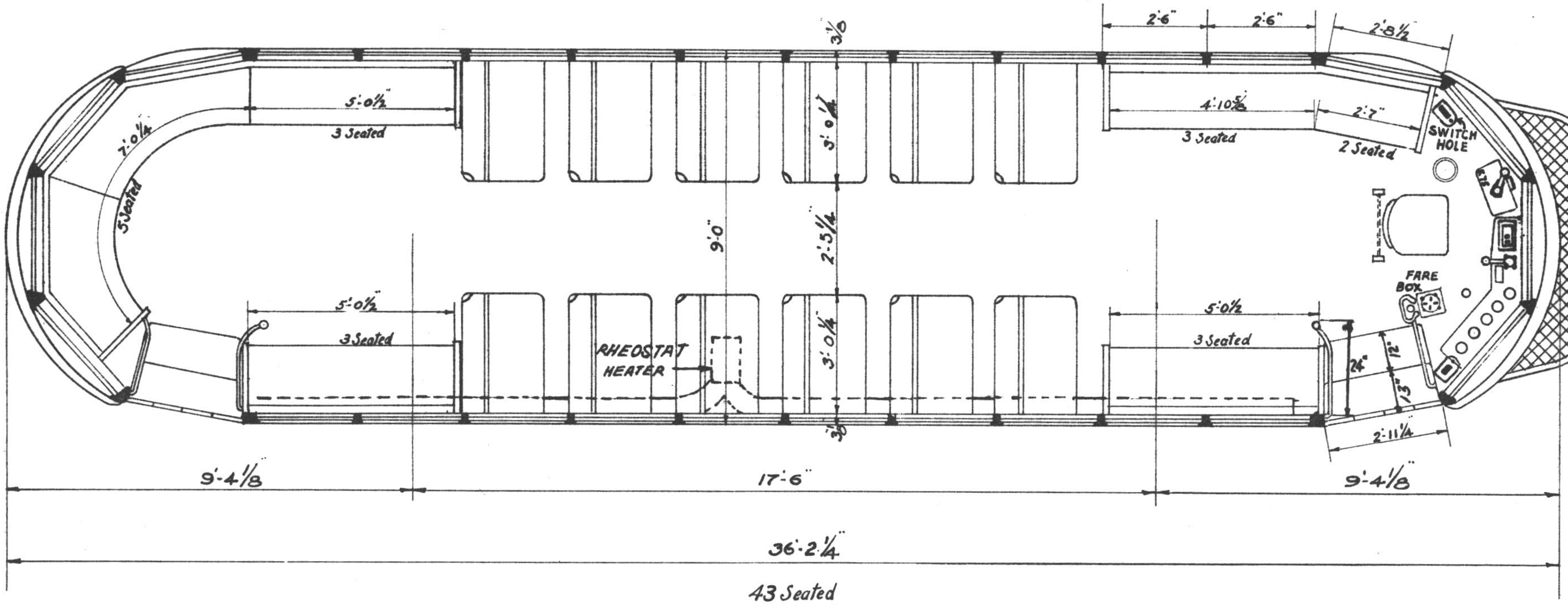
Car body including control and air brakes	13,150 lb.
Trucks, per pair	7,000 lb.
Motors and control	4,300 lb.
TOTAL	24,450 lb.

EQUIPMENT

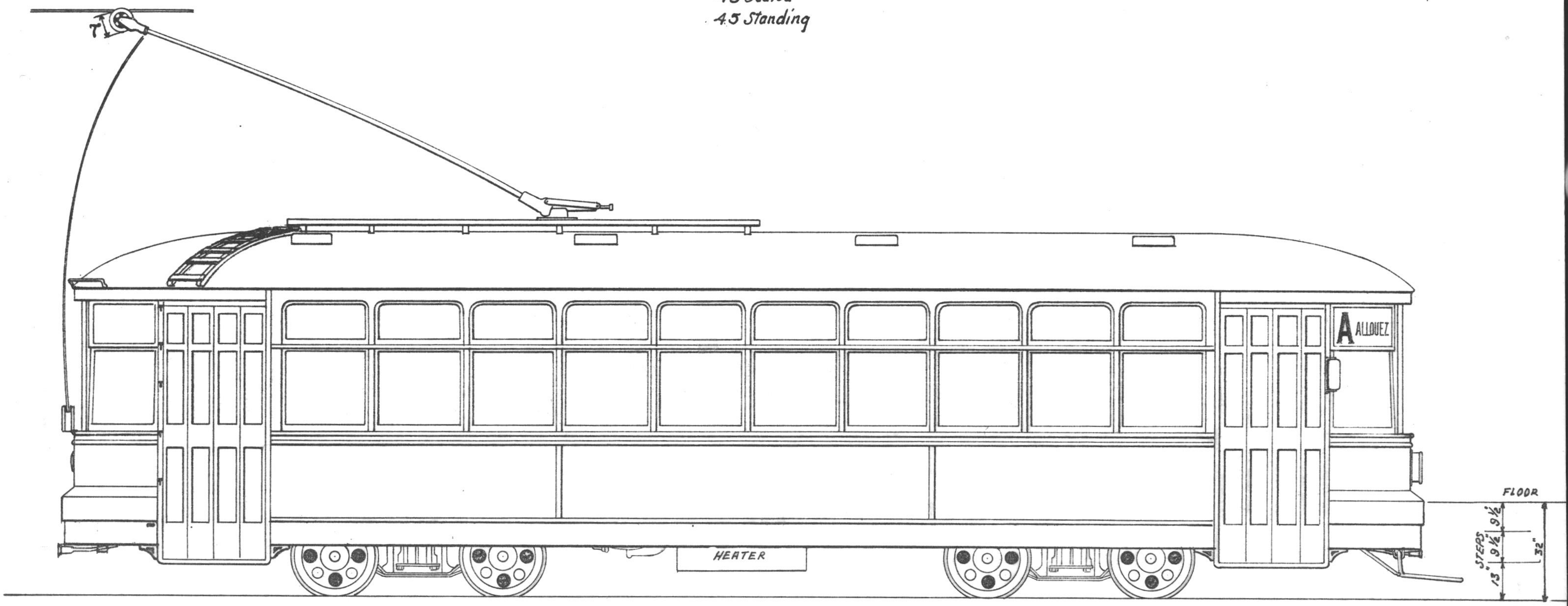
Motors and type	Four GE-258
H.P. per motor	25
Gear ratio	74/13
Control	GE single-end Type K-35


10ft 3¼"
9ft. 4⅛ in.
17 ft. 6 in. Truck Centers
9 ft 4⅛ in.
36ft. 2¼ in. Over Bumpers
29¾ in.
36¼ in.
9ft 0 in.

CAR BUILT BY THE LIGHT-WEIGHT NOISELESS ELECTRIC STREET CAR CO.


2'6"
2'6"
2'8½
3½
5'0½"
3 Seated
7'0¼
5 Seated
3'0¼
4'10⅝
3 Seated
2'7"
2 Seated
SWITCH HOLE
9'0"
2'5¼
FARE BOX
5'0½"
3 Seated
RHEOSTAT HEATER
3'0¼
5'0½
3 Seated
24"
12"
13"
2'11¼
3½
9'4⅛
17'6"
9'4⅛"
36'2¼"

43 Seated
45 Standing


7"
A ALLOUEZ
HEATER
FLOOR
STEPS
13"
9½
9½
32"

LIGHTWEIGHT CAR PROBLEMS

Duluth Street Railway encountered some problems with their cars, 301-305, and we have been fortunate to locate correspondence which details the difficulties.

Since the cars were built light to accelerate and brake quickly in order to compete with bus and automobile traffic, they were more refined and complex. DSR said they needed closer inspection, more constant attention, and more skill in maintenance.

Motormen liked to start up quickly and set the brakes at the last minute when stopping. This led to the following problems.

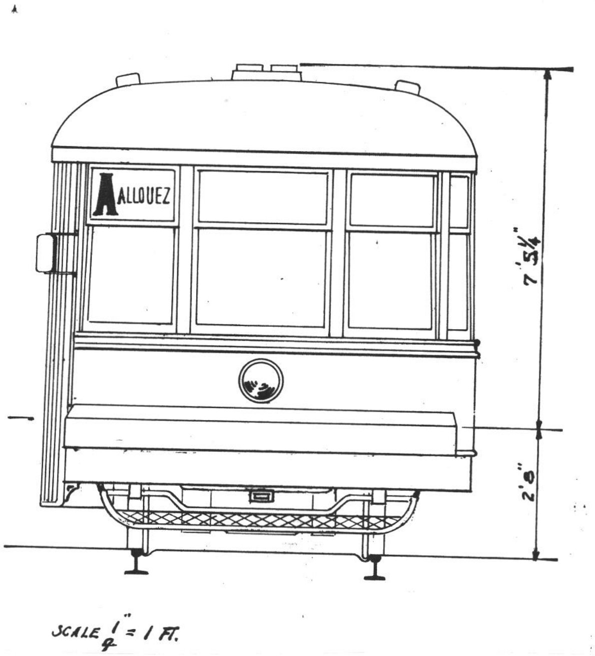
1. Excessive flange wear. Normal wear was about two years compared to three months on the lightweight cars.
2. Excessive wheel wear due to flat wheels caused by skidding when stopping. In one month and nine days DSR had to change 18 pair of wheels, regrinding 12 pair, and scrapping six pair.

The motor clearance was only 2" to 3" above the street. In winter thaws water was often 3" to 4" deep on the tracks so that motors were grounding and fields burning out. The cars were not good on slippery rail or in snow storms. If ruts were formed in the snow and ice adjacent to the flangeways the brake drums would rub on the ridges. Brake drums wore out rapidly and many had to be discarded due to cracked spokes or blow holes in the face of the drum.

DSR further reported that in spite of the carbuilder's name the cars were noisy due to squealing brakes, excessive gear noise, and rattling window sash. Patrons were subjecting the company to ridicule with their comments on the builder's nameplate displayed in the cars.

TCRT advised DSR's mechanic that the problems could by cured by sinking in the rivets on the brake bands and watching the bearing wear more closely. Due to the small amount of clearance at the bottom of the gear teeth, if the bearings got worn the gears got noisy. TCRT also advised adjusting the window sash and springs, resetting the glass in the process.

Finally, the masonite side and end panels were delicate, very easily damaged in collisions with automobiles.



301-305 failed on the hills in Duluth due to overheating of traction motor field coils. As early as March 1929 DSR had consulted with G.E. regarding this problem.

EQUIPMENT

SERVICE EQUIPMENT

Car Numbering System

Service Equipment carried two numbers, one for the work equipment series and one for the passenger equipment series.

The work equipment series was a functional one in that each equipment category was numbered beginning with 1. (Snow Plow number 1, 2, 3, etc.; Flat Car number 1, 2, 3, etc.)

The numbers in the passenger equipment series were apparently based on which city the particular service car was assigned. Duluth cars used the available 60 series and 90 series numbers, while Superior cars used the 130 series numbers. When the 60 and 90 series numbers were completed (with one exception) all subsequent service equipment was assigned 140 series numbers. New passenger equipment purchased beginning in 1901 was numbered starting with 151. As it turned out the numbers 98, 149, and 150 were never used.

SERVICE EQUIPMENT

1 car, 51 Tower Car. Ex single-truck passenger car built by LaClede Car Co. in 1892. A platform and line tower were built on the roof of this car in 1892. Length: body 22'0", overall 32'9"; width 8'0". One McGuire truck, two Thomson-Houston SRG 30 motors, two K-2 controllers, weight 18,000 lbs.

1 car, 62 Supply Car. Ex single-truck passenger car built by LaClede Car Co. in 1892. Rebuilt into a Supply Car in 1915 for use in Superior. Same measurements and mechanical data as Tower Car 51.

1 car, 131 Supply Car. Ex single-truck passenger car built by American Car Co. in 1894. Rebuilt into a Supply Car in September 1920. The sole survivor of the original Superior single-truck cars, it served as a general purpose supply-tower-tow-miscellaneous car in Superior. Length: body 22'2", overall 33'2"; width 7'11". One McGuire 19F truck, two Thomson-Houston W.P. 30 motors, two K-2 controllers.

1 car, 1/139 Snow Plow. Built by Duluth St. Ry. 1896. The article by Walter J. Smith, DSR master mechanic in a February 1904 Street Railway Journal article (appended) stated the car was built in 1896. The Ford, Bacon & Davis Report of 3-3-1900 does not list an age for the carbody but does show an age of 1½ years for the Brill trucks, or about mid-1898. This was a double-end snow plow designed by Walter J. Smith. The body had a sliding door (for the crew) on one side only, the steel shear plows at each end were operated by compressed air, and the wing plows on each side operated by electric motors. DSR records carry a building date of 1902 on this, reason unknown. Wood underframe. Lenth: body 24'0", overall 41'6"; width 8'0". Brill 27-A1 trucks, four Westinghouse 49 motors (35 h.p.), two G.E. K-12 controllers.

1 car, 1/64 Flat Car. Built by Duluth St. Ry. 1901. As built this car had two unenclosed control cabs. Later one enclosed offset control cab was constructed. In 1911 a second enclosed offset control cab at the opposite end was constructed. The final rebuilding consisted of replacing the offset cabs with 4'6" x 4'6" pedestal-mounted center-located cabs. Steel underframe. Length: 40'0", overall 42'2"; width 8'6". The drop sideboards were 22" high. Two Brill 27-A2 trucks, four motors and two controllers.

1 car, 2/65 Flat Car. Built by Duluth St. Ry. 1902. The earliest available photograph shows this car with enclosed offset control cabs at each end. It was finally rebuilt identical in appearance to 1/64 Flat Car. Steel underframe. Measurements identical to 1/64 Flat Car.

1 car, 2/66 Snow Plow. Built by Duluth St. Ry. 1903. Identical in design and measurements to 1/139 Snow Plow. Wood underframe.

1 car, 1/67 Tower Car. Built by Duluth St. Ry. 1904 from the wood underframe and equipment of open passenger motor car 95. Wood underframe. Length: body 28'0", overall 30'4"; width 8'0". The offset cab measured 5'6" x 6'8"; the swivel tower was hand-operated, and a reel stand was mounted on the deck.

1 car, 3/140 Snow Plow. Built by Duluth St. Ry. 1906. Steel underframe. Identical in design and measurements to 1/139 and 2/66 Snow Plows.

1 car, 3/96 Flat Car. Built by Duluth St. Ry. 1907. The earliest available photograph shows this car with one unenclosed control cab and one enclosed offset control cab; an I-beam swing derrick equipped with a 1-ton capacity electric chain hoist was mounted on the deck behind each cab. Later a second enclosed offset control cab replaced the one unenclosed cab. The final rebuilding saw two pedestal-mounted center-located control cabs installed at each end. Steel underframe. Measurements were identical to 1/64 and 2/65 Flat Cars.

1 car, 1/141 Wrecker-Crane. Built by Twin City Rapid Transit Co. 1911. This was a standard TCRT Work Car equipped with an 8-ton capacity crane powered by a 7½ h.p. electric motor. Steel underframe. Length 37'2½"; width 7'10". Weight 52,710 lbs.

1 car, 4/97 Flat Car. Built by Duluth St. Ry. 1912. Built with pedestal-mounted center-located cabs on each end. Steel underframe. Measurements identical to the previous three Flat Cars.

4 cars, 5/142, 6/143, 7/144 and 8/145. Flat Cars, single-truck. Built by Duluth St. Ry.; 5/142 in April 1917 and the other three cars in July 1917. Wood underframe. Length 21'0". These cars were built for use in constructing the "Morgan Park" and "New Duluth" lines. Each had an enclosed offset control cab on one end, and drop sideboards. Some cars had Thermit welding equipment, air compressor, and concrete mixing equipment temporarily mounted on the deck at various times. One McGuire truck, two Thomson-Houston SRG 30 motors, two K-2 controllers except 6/143 with one.

5/142 received the equipment from passenger car 85. It was later used by the Roadway Dept. with one K-2 controller.
6/143 received the equipment from passenger car 61. It was fitted with a swivel crane equipped with a Chisholm & Moore Cyclone chain block hoist. Later used by the Roadway Dept. it finally ended up as an Ash Car.
7/144 received the equipment from passenger car 49. It was used as the Shop Coal Car in later years.
8/145 received the equipment from private car 42. It was later used as the Shop Ash Car with one K-2 controller.

1 car, 4/146 Snow Plow. Built by Twin City Rapid Transit Co. November 1917. This car was identical to TCRT Snow Plows 75-82 which were built at the same time. It was the property of the U.S. Shipping Board Emergency Fleet Corp. until 1921 when formally acquired by DSR. Steel underframe. Length 37'2"; width 7'9". Weight 64,320 lbs.

1 car, 5/147 Snow Plow. Ex-Park Point Traction Co. 12, rebuilt from a single-truck closed passenger motor car, one of Interstate Traction Co. 1-4, ex-DSR 63-66, acquired in 1899. Rebuilt into a Snow Plow by PPTC. The underframe and carbody had been specially

reinforced; a steel shear plow fitted on each end. It remained in service on the "Park Point" line.

1 car, 3/148 Tower Car. Ex-Park Point Traction Co. 13, rebuilt by PPTC from a single-truck closed passenger motor car, probably ex Superior Rapid Transit Ry./Douglas County St. Ry. 110 or 117 built by Northern Car Co. in 1891. (Most likely 110 as DSR rebuilt 111 and 112 into Tower Cars.) A 5'8" x 5'0" fixed platform was built on the roof.

1 Electric Shovel, no number, purchased from the Thew Automatic Shovel Co., April 1922, for $7,950. Provided with four flanged wheels or wide-tread wheels for on-rail or off-rail use. One 1/3 cu. yd. bucket. One G.E. CV motor. Weight 56,000 lbs. Used until about 1964.

1 Gondola Trailer, no number, built by Duluth St. Ry. about 1915. Length 15'0"; width 6'2".

2 Flat Trailers, no numbers, built by Duluth St. Ry. about 1915. Length 15'3". One Bemis truck.

3 Gondola Trailers, no numbers, built by Duluth St. Ry. in 1923. Steel underframe. Length 15'3"; width 6'2", sideboards 3'4" high. Used as Ash Car Trailers, one in Superior and two in Duluth. One McGuire truck. Superior shops received the trailer with the truck from passenger car 79. Duluth shops received the two trailers with the trucks from passenger cars 47 and 51 (ex Tower Car).

1 car, GOLIATH, Ice Breaker. Built by Duluth St. Ry. 1928. Steel underframe. Length 7'0". Equipped with four flanged wheels, the frame contained a 7'0" wide x 28" diameter sand-filled steel roller fitted with steel cleats. Usually towed by Snow Plow 4/146.

On March 14,1930, DSR received the Fire Car (ex PPTC 5, ex DSR 92) from the City of Duluth in exchange for the Park Point Fire Car House. DSR records of obsolete equipment retired in 1931 included "Park Point trailer and Park Point fire car".

Flat Cars 1/64, 2/65, 3/96, 4/97 received the full cabs (4' 6" x 4' 6"') in December 1916. 3/96 received two 1-ton electric chain hoists April 1917. All four received snow plow blades on each end May 1930.

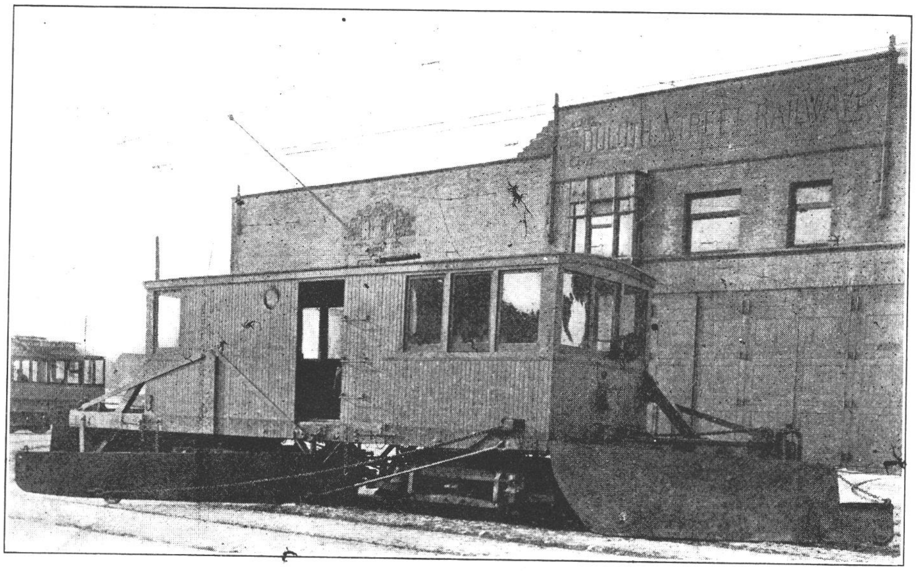
Wrecker 1/141: the crane was purchased from Bay City Industrial Works.

HANDLING SNOW IN THE NORTHWEST

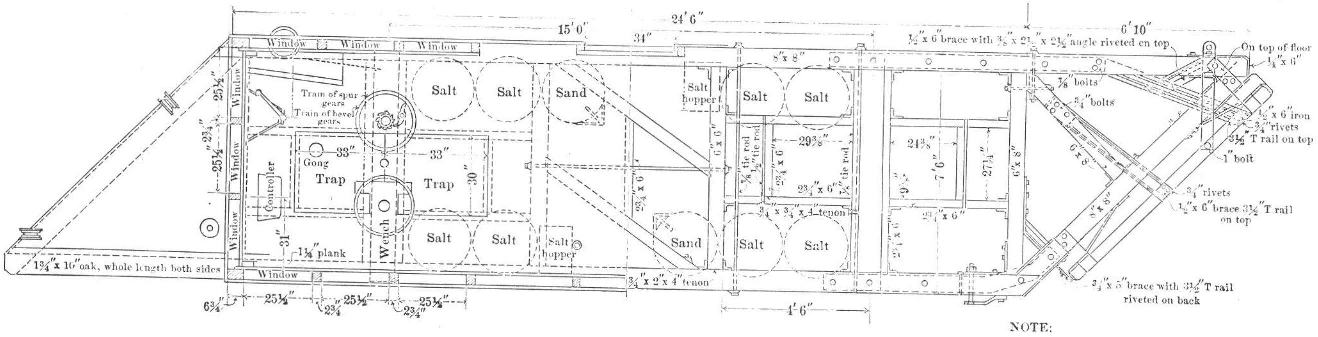
Duluth, Minn., Feb. 10, 1904.

Editors Street Railway Journal:

In your editorial on the snow problem in the Street Railway Journal of Jan. 23, you ask for the experience of street railway companies in handling snow. The Duluth Street Railway Company has almost 75 miles of track in Duluth and Superior, 50 per cent of which runs through unsettled or thinly settled districts. Part of this track is from 300 ft. to 700 ft. above the lake level, and with the heavy snow-fall, low temperature (38 degs. below zero Jan. 25 this winter) and high winds, we would be expected to have trouble with snow, but in the last seven winters we have had very little trouble with it. We have on the different lines 8 miles of snow fences. All of our ninety-six cars are equipped with track scrapers. Part of these scrapers are heavy, all are well designed, and they do good work. On double-truck cars they are hung very low on the trucks.


DULUTH STREET RAILWAY

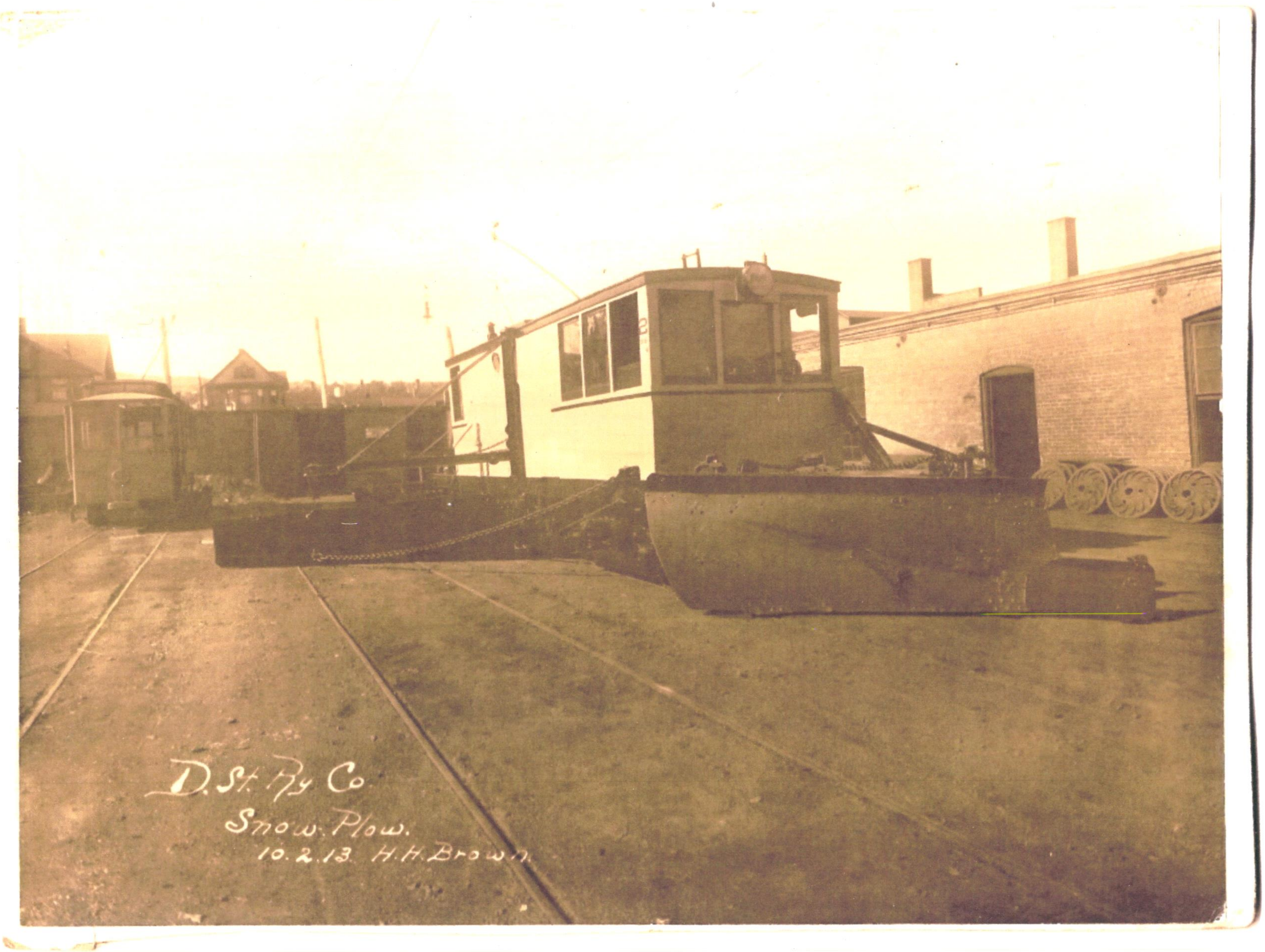
SNOW PLOW BUILT IN DULUTH RAILWAY SHOPS


Window
Window
Window
Window
Window
Window
Window
15′ 0″
24′ 6″
34″
6′ 10″
25½″
2¾″
25½″
Train of spur gears
Train of bevel gears
Salt
Salt
Sand
Salt hopper
Salt
Salt
33″
33″
Gong
Trap
Trap
30″
Controller
Wench
31″
1¼″ plank
Salt
Salt
Salt hopper
Sand
Salt
Salt
1¾″ x 16″ oak, whole length both sides
6¾″
25½″
2¾″
25½″
2¾″
25½″
¾″ x 2″ x 4″ tenon
4′ 6″
8″ x 8″
6″ x 6″
⅞″ tie rod
½″ tie rod
29⅜″
2¾″ x 6″
2¾″ x 6″
⅞″ tie rod
¾″ x ¾″ x 4″ tenon
2¾″ x 6
24⅜″
9½″
7′ 6″
27¼″
2¾″ x 6″
2¾″ x 6
6″ x 8″
½″ x 6 brace with ⅜″ x 2½″ x 2½″ angle riveted en top
On top of floor
¼″ x 6″
⅞″ bolts
¾″ bolts
½″ x 6″ iron
¾″ rivets
3½″ T rail on top
1″ bolt
6″ x 8″
8″ x 8″
¾″ rivets
½″ x 6″ brace 3½″ T rail on top
¾″ x 5″ brace with 3½″ T rail riveted on back

NOTE:
All angle irons set back ⅜″ from end on small sills
Street Ry. Journal

PLAN OF SNOW PLOW BUILT AT DULUTH RAILWAY SHOPS

In 1896 we designed and built a plow, which is shown in the illustration. This plow is provided with a front wing, track scrapers and a side wing on each side. It is a double-end plow, and carries salting and sanding apparatus. The front wing can be raised 1 ft., but when this wing is in use it scrapes the rail. The bottom edge of the wing at the rail is provided with cast-steel shoes, which will ride over the guard rail, switches or anything which the wing has ever struck. This wing is 4 ft. wide and 11 ft. 5 ins. long, and is at an angle of 45 degs. with the rails.


D. St. Ry. Co.

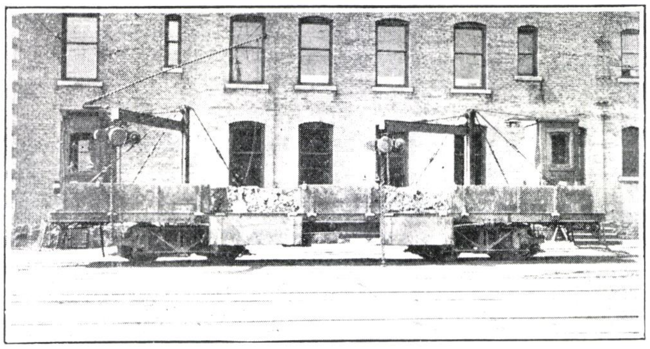
Snow Plow.

10.2.13 H.H. Brown.

ERJ 9.7.1912

DULUTH STREET RAILWAY WRECKING CAR AND WORK CAR

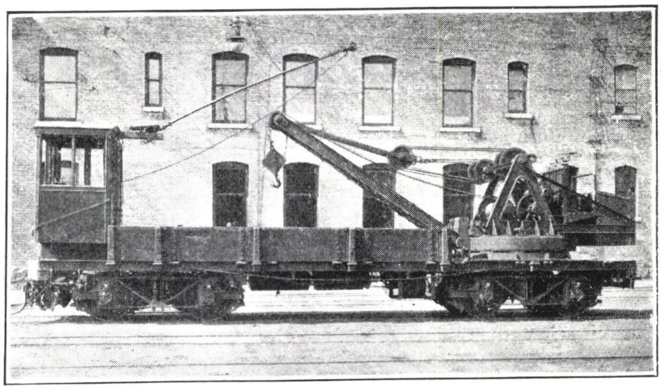
The Duluth Street Railway, Duluth, Minn., is equipped with a wrecking and general utility car of novel design. Essentially the car consists of an all-steel underframe 37 ft. 2½ in. over the bumpers and 8 ft. over-all width. The rframe construction is novel in that the design includes two 7-in. 80-lb. T-rail side sills and two 5-in. 80-lb. T-rail center sills. The cross beams are made of two 1-in. x 5-in. steel straps with a 5-in. x 5-in. oak separator. The car floor and sides are of 1¾-in. wood construction with wooden stakes and hinged panels in the car sides so that they may be dropped, leaving the floor clear when the stakes have been removed.



Duluth Track Car

The trucks are of this company's standard, known as No. 7, design, with 5-ft. 8-in. wheelbase and outside-hung brakes. Each truck is equipped with two GE-70 motors. Mounted directly over the center of the rear truck is an 8-ton revolving electric crane which includes essentially a -steel bearing plate bolted to the car underframe and a ring, the inside of which has been supplied with a rack cast as a part of it. By the use of a set of swivel driving gears the slip ring may be revolved through a complete circle.

Two drums are mounted in a heavy cast-steel frame supported on the slip ring. These drums are driven by two 7½-hp General Electric motors. One is used for raising the load at the end of the 13-ft. 6-in. boom and is installed at the back of the operator's platform; the other raises the boom and is installed beside the first motor. A third 7½-hp motor has been installed on the car body clear of the revolving crane parts and rotates the crane through a set of gears. The three motors are controlled by three GE type R-28 controllers installed at the front of the operator's platform.



Duluth Wreckage Crane Car

The motorman's cab is at the opposite end of the car from the crane. It is of wood construction, 4 ft. 1¼ in. x 6 ft. 1¼ in. in plan. The trolley stand is mounted on a 3½-in. x 12-in. ridge beam which extends 2 ft. 8 in. beyond the rear of the cab. A five-light cluster has been installed directly under the stand to furnish artificial illumination to the car body at night, as a complete set of blocking necessary in wrecking is carried under the boom.

The wrecking car was designed and built at the Twin City Rapid Transit Company's shops in St. Paul, Minn., as the Duluth company's president is C. S. Goodrich who is also president of the Twin City lines.

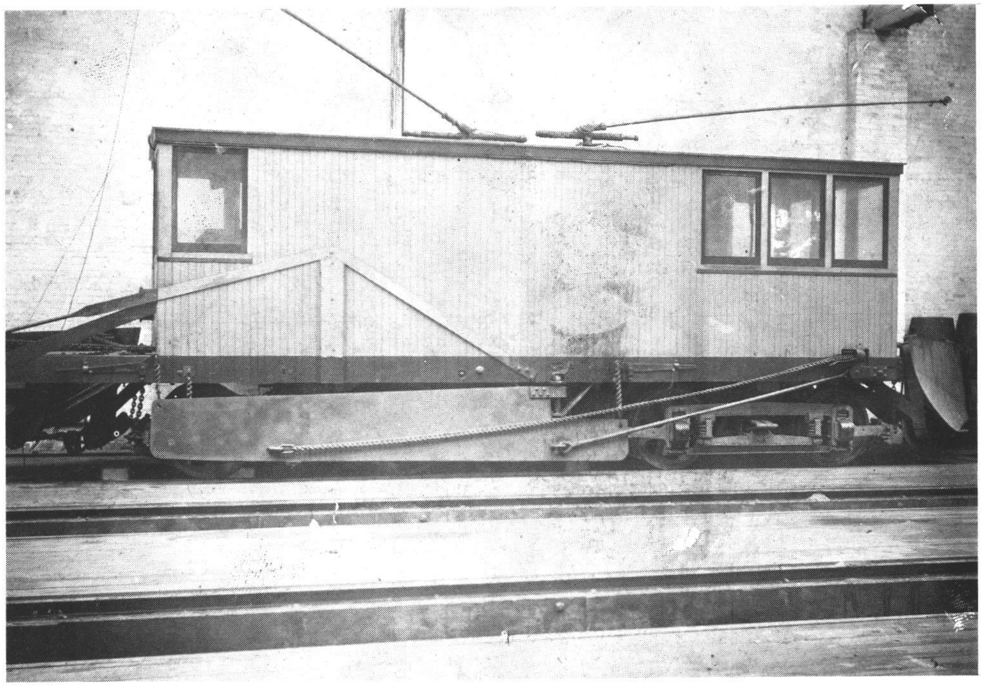
In designing the crane the engineers were governed by the limited head room available under the trolley wires and the desire to build a wrecking car that would handle ordinary loads and at the same time would not be so cumbersome as to restrict its movement over the railway company's lines.

WORK CAR

The work car used by the track department is approximately 46 ft. over bumpers and 8 ft. 8 in. wide. The design of the underframe and trucks is similar to the design used in the wrecking car, except that it is mounted on lighter trucks of the company's standard design. The utility car is equipped with two motorman's cabs so that it may be operated from either end; the design of the cabs and trolley-stand mounting is the same as that employed on the wrecking car.

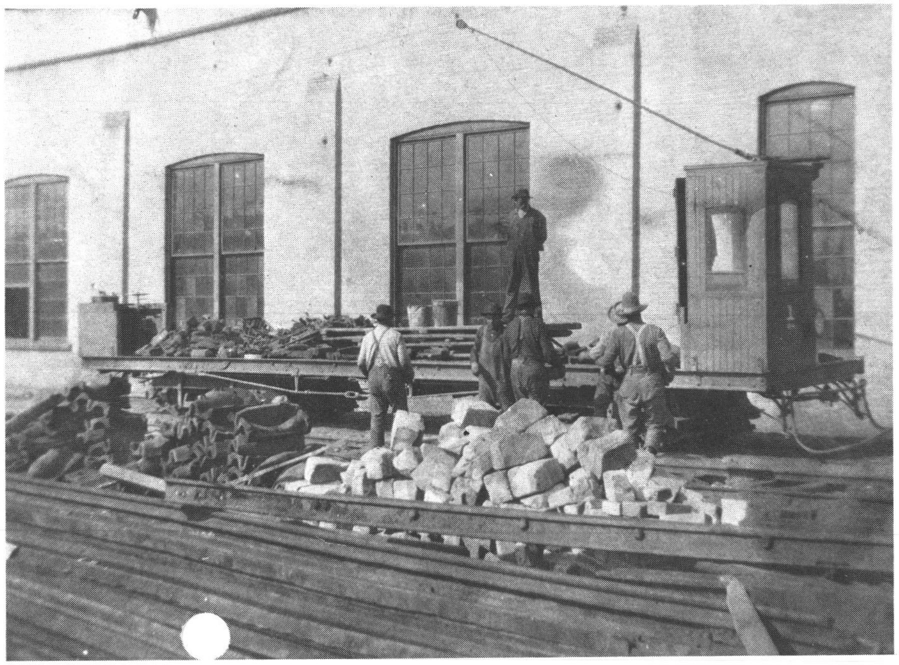
A novel feature in the work-car equipment includes two small cranes with 20-ft. jib booms installed at each end. A 1-ton electric hoist has been mounted on a trolley which may be run the length of the jib boom. The mast is guyed to the car underframe by three 1-in. tie rods and energy is supplied to the electric hoists through a flexible cable leading from the trolley stand to the mast. The hoist equipments were installed on the work car in order to facilitate handling of heavy material. The installation is comparatively inexpensive and the time and labor saved soon absorbed the cost of the equipment.

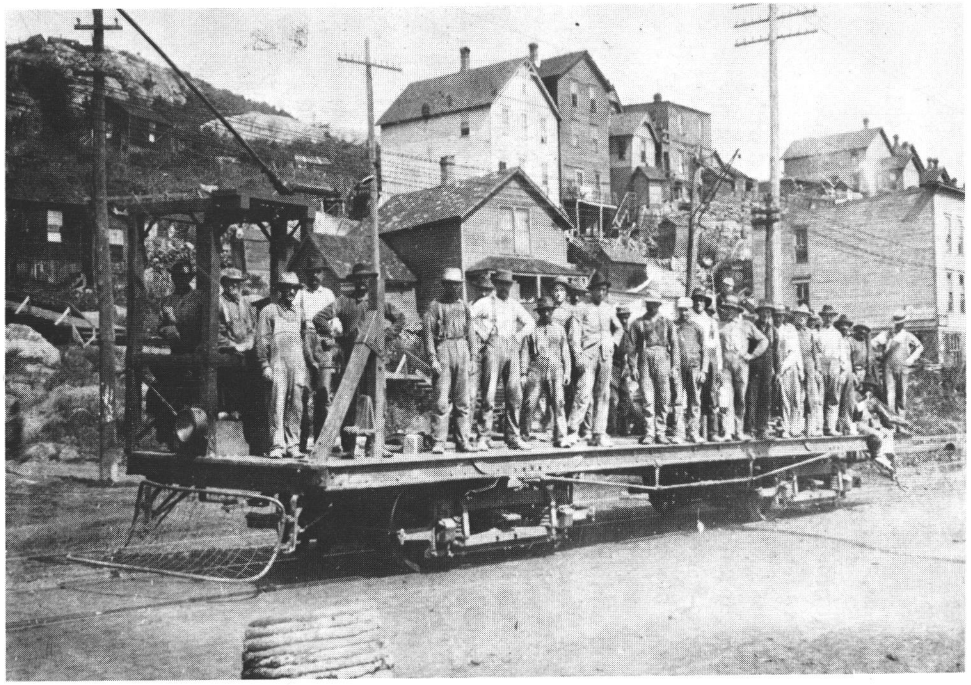
The New York Central Lines has reprinted in pamphlet form the article, "Trespassers Killed on Railways—Who Are They?," contributed recently to the *Railway Age Gazette* by Frank V. Whiting, general claims attorney of the New York Central Lines. The pamphlet also contains the editorial on the same subject which was published by the *Railway Age Gazette* at the time the article appeared in its columns.



Above: An early view of Snow Plow 1 with Brill 27 A-1 trucks.

Below: First rebuilding of Flat Car 1, equipped with DSR trucks.

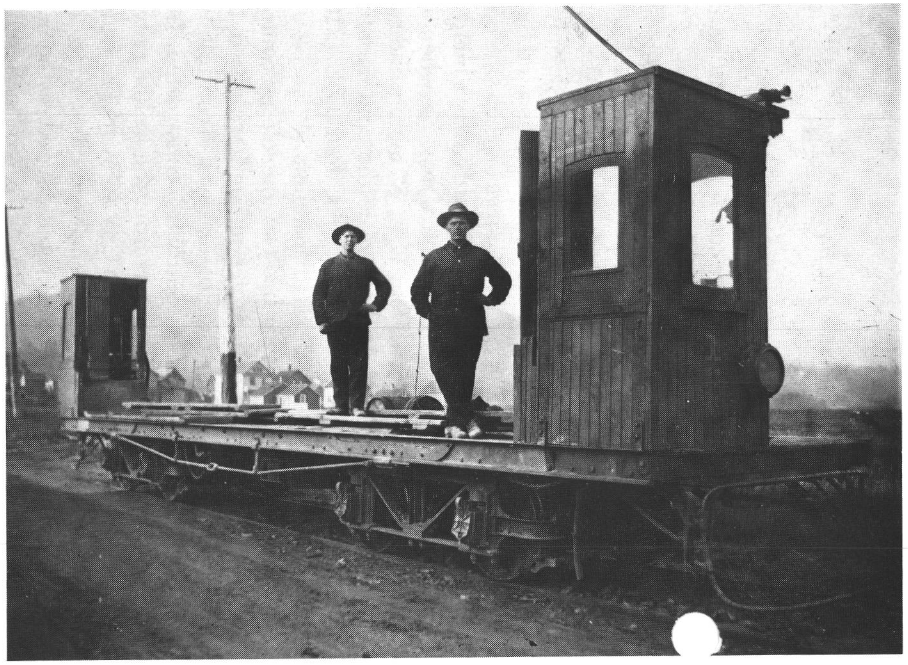




Above: Flat Car 1 as originally built (Brill 27A-2 trucks), transporting a track construction crew to the work site.

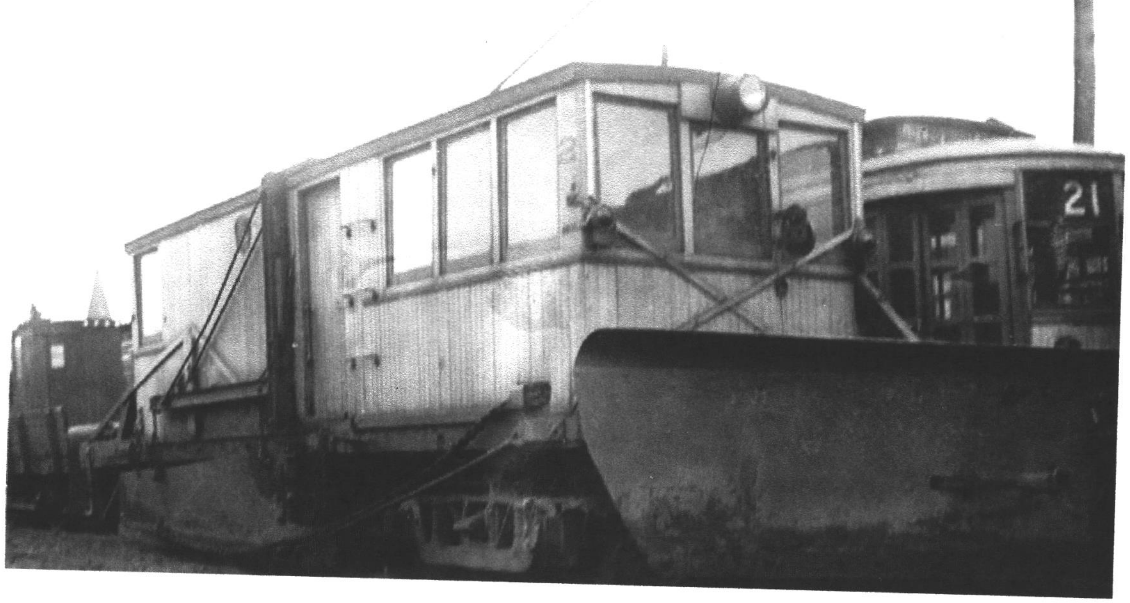
Below: Second rebuilding of Flat Car 1, now equipped with Twin City Work Car trucks.

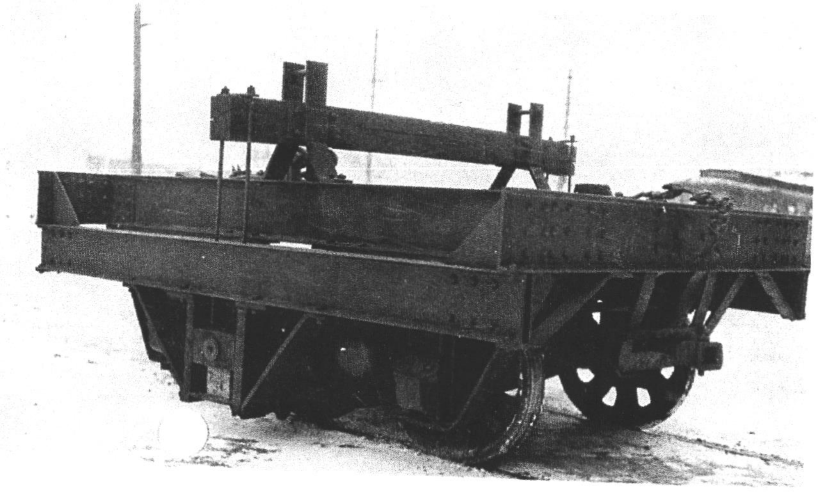
(All photographs Wayne C. Olsen collection)



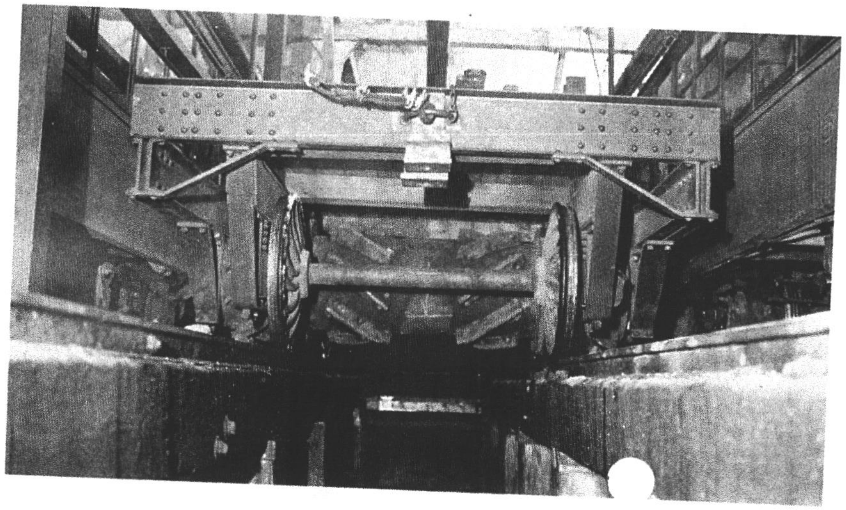
Duluth-Superior Transit 2 at Duluth, MN

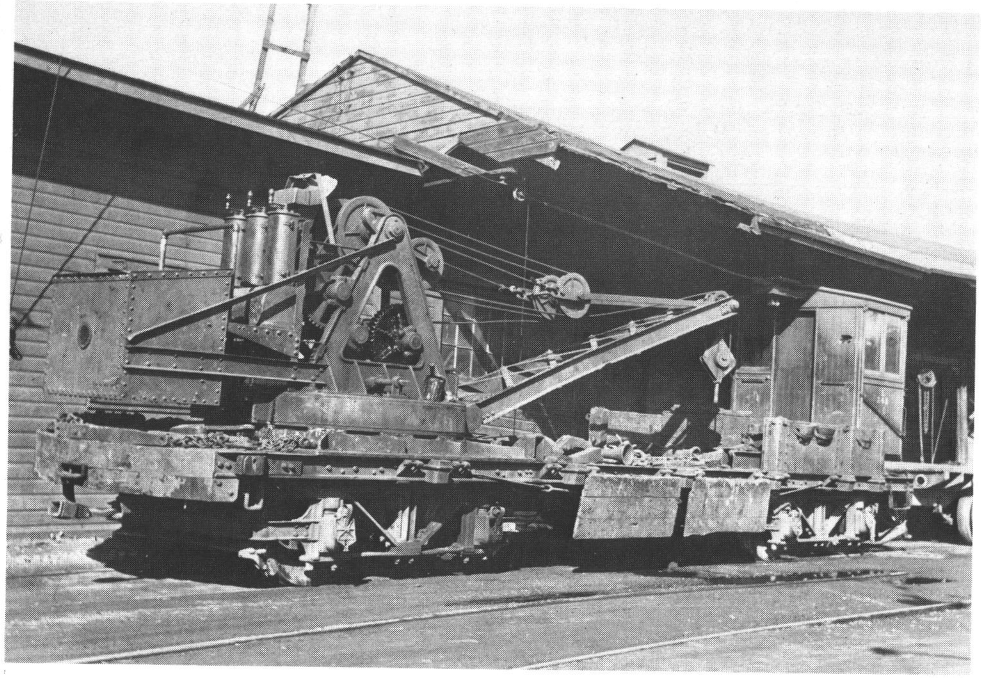
Don Ross Collection.

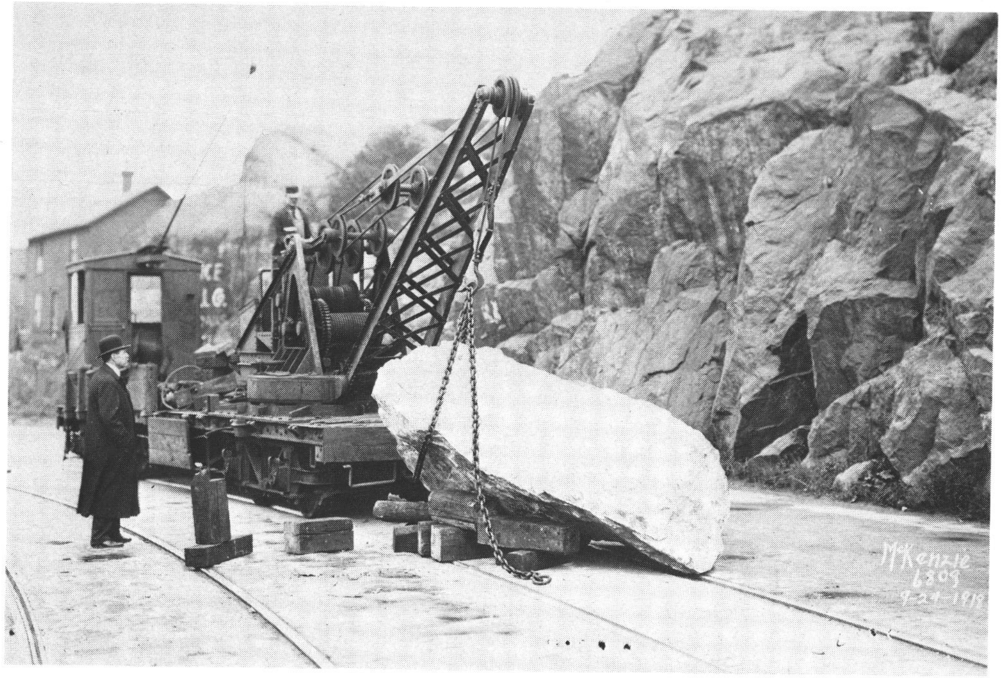




Two views of Ice Breaker "Goliath". R; Wayne C. Olsen collection)






McKenzie
6809
9-24-1918

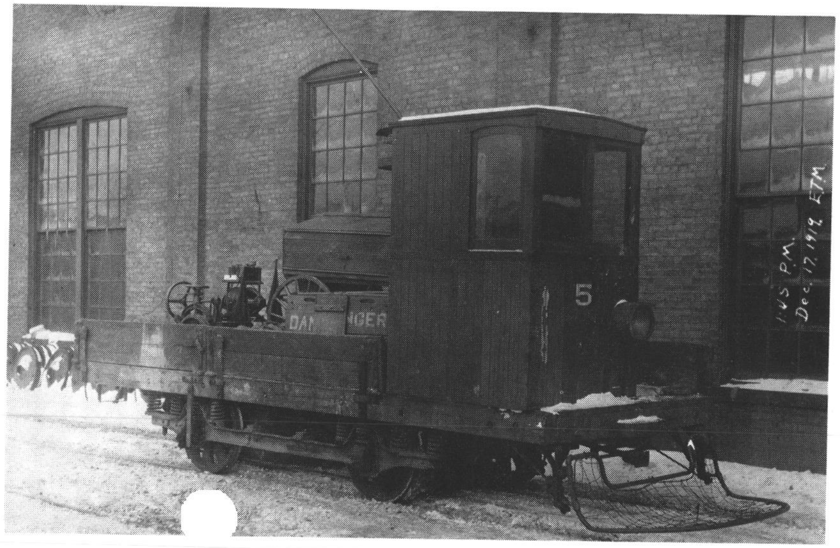
Above left: Wrecker-Crane 1 at the Duluth car storage yard. Note the three controllers for the electric motors that operated the crane.

Above right: Cleaning up a rock slide at the Point of Rocks near 14th Ave. W. and Superior St., September 24, 1918. (McKenzie Studios)

Below left: Flat Car 5 as it appeared on December 17, 1919.

Below right: Snow Plow 4 newly received from the builder in November, 1917.

(All photographs DSR; Wayne C. Olsen collection)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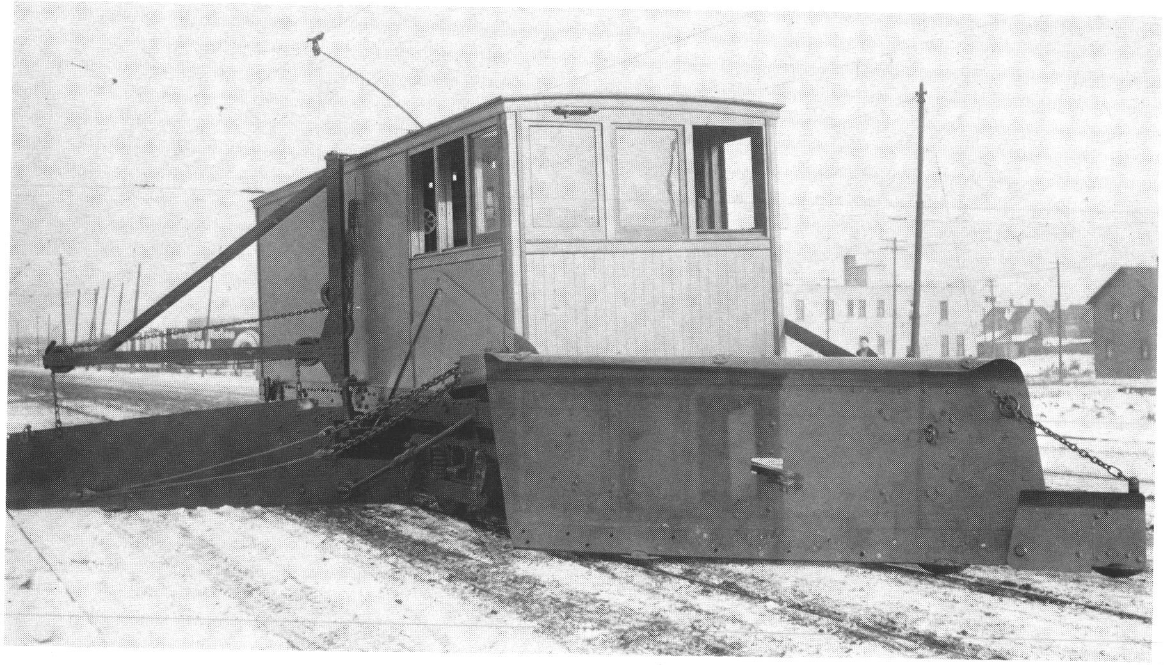
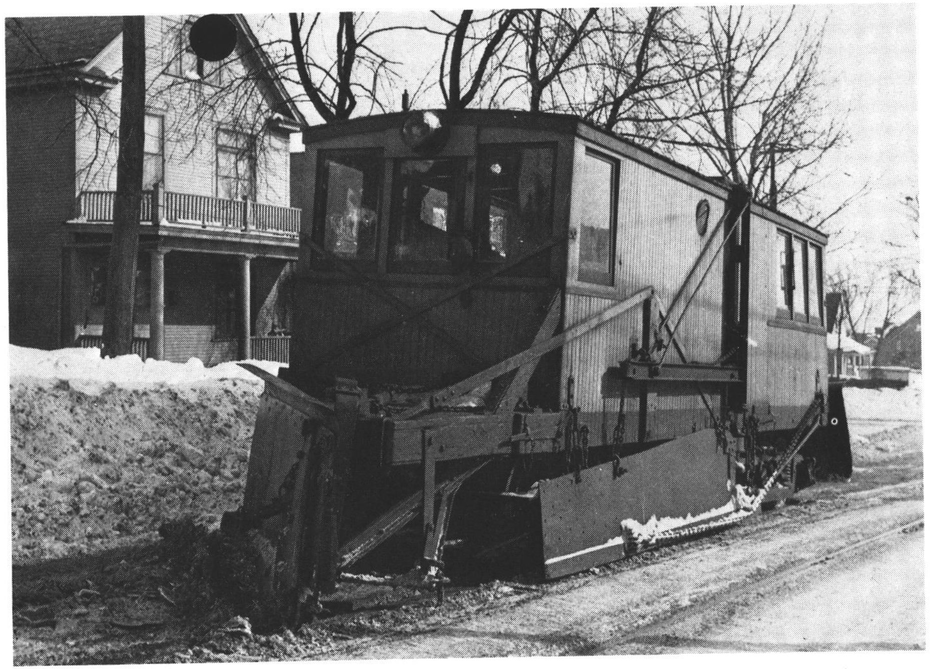
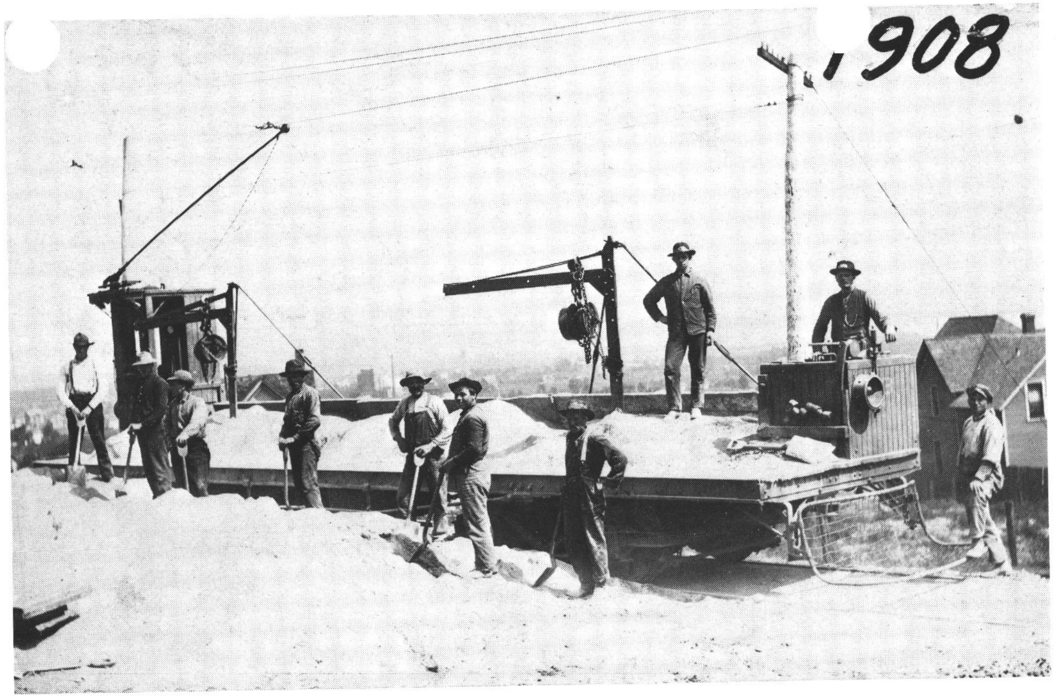
Dec. 17, 1919 ETM





Snow Plow 3 on E. 9th St. at 7th Ave. E. in February, 1936. (James Kreuzberger)

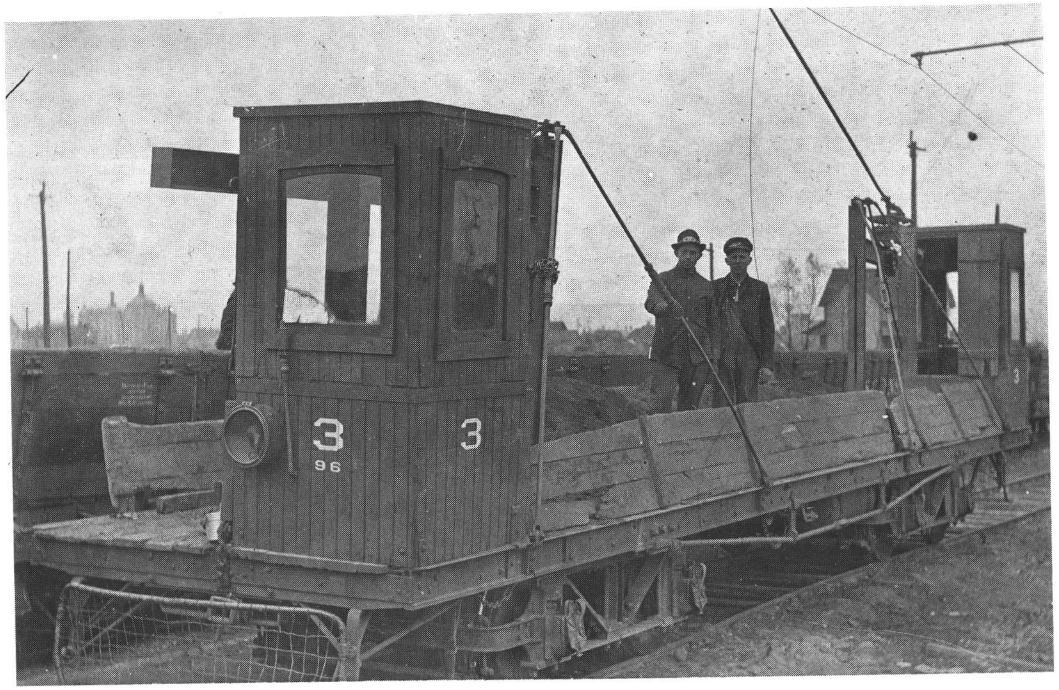


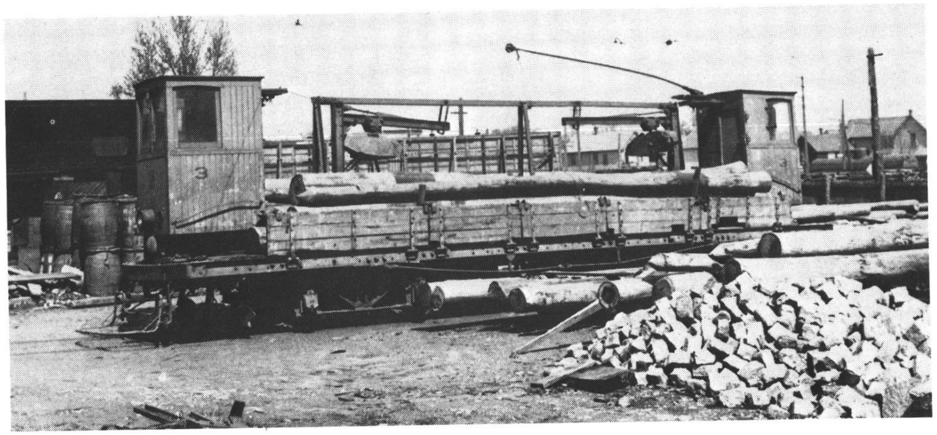
Above: Flat Car 3 on the loop at 57th Ave. W. and Medina St. in 1908.

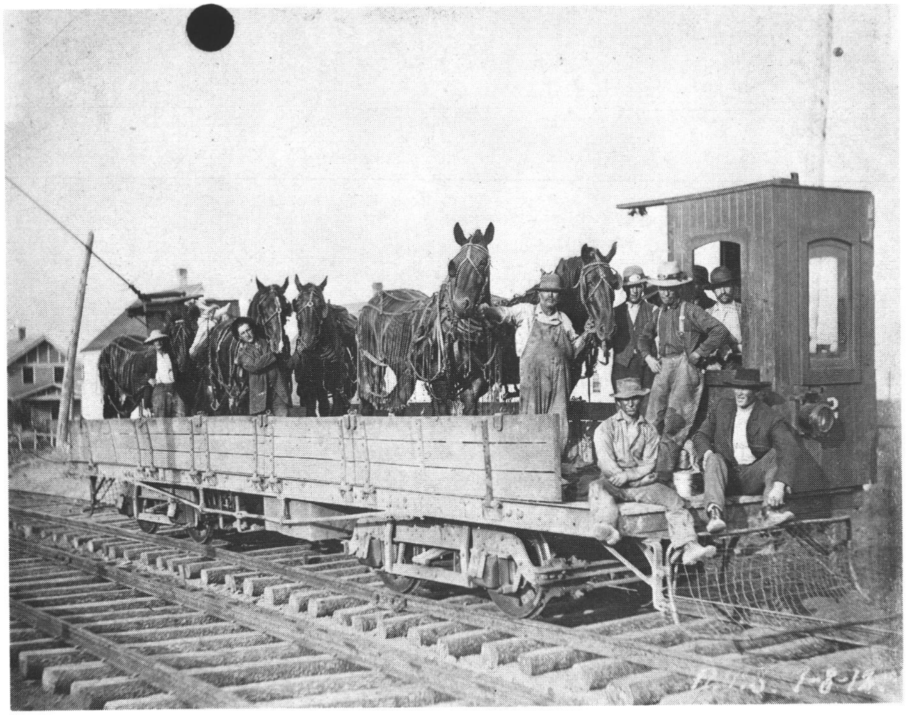
Below left: Flat Car 3 as next rebuilt, unloading ballast in Superior about 1917.

Below right: Flat Car 3 as finally rebuilt. The cabs were identical to those on Flat Cars 1 and 2, and the head-on appearance was also the same.

(All photographs Wayne C. Olsen collection)





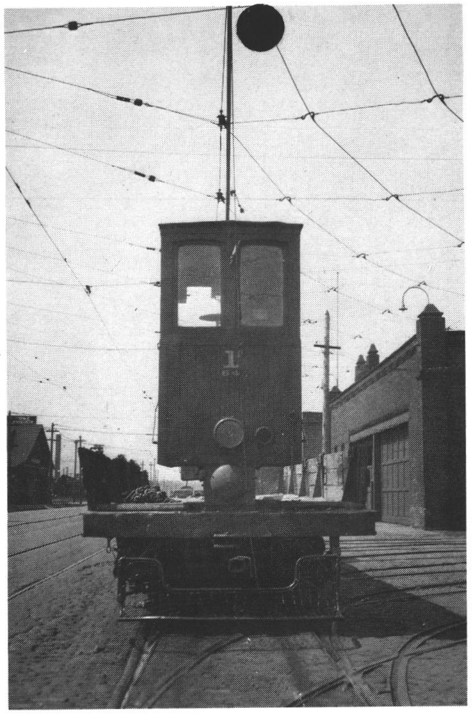


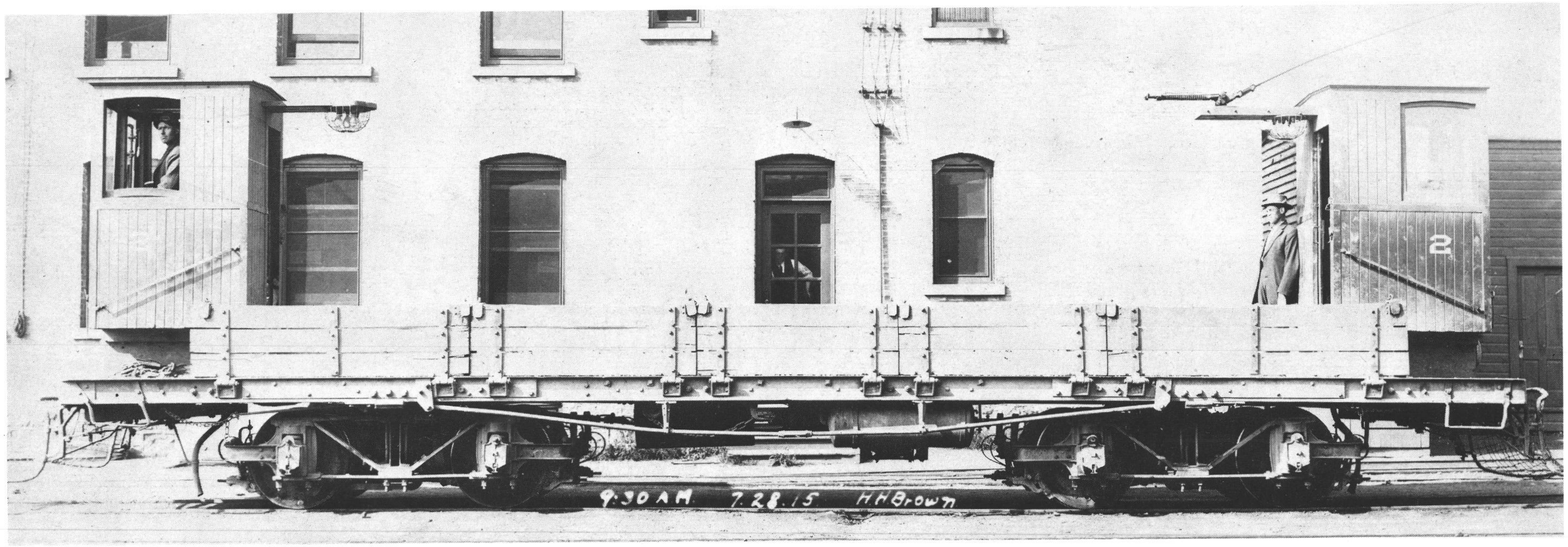
Left: Flat Car 2 on the E. 9th St. track construction project, January 8, 1912, providing a good look at the DSR trucks.

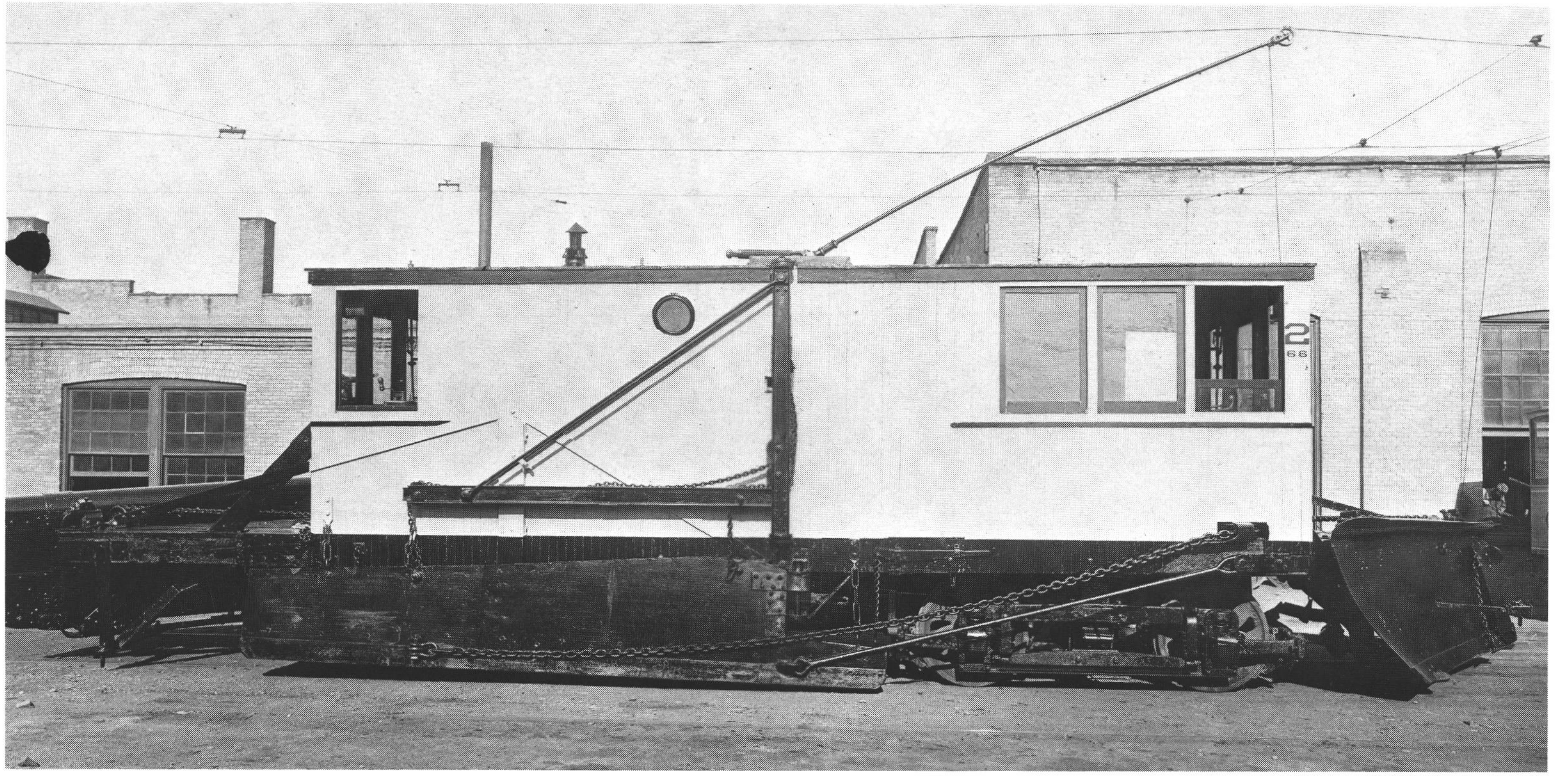
Right: Head-on view of Flat Car 1 as finally rebuilt. Flat Car 2 was identical in appearance. Taken on the ladder track at the Duluth carhouse.

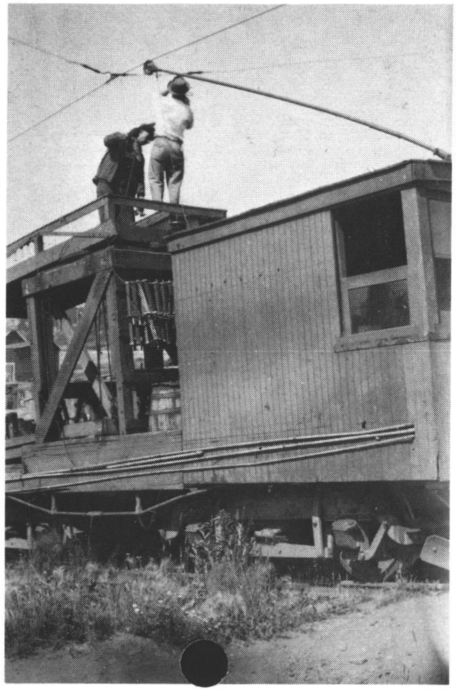
Below: Flat Car 2 after its final rebuilding, with Twin City Work Car trucks. Both cabs on Flat Cars 1 and 2 were identical as finally rebuilt.

(All photographs DSR; Wayne C. Olsen collection)







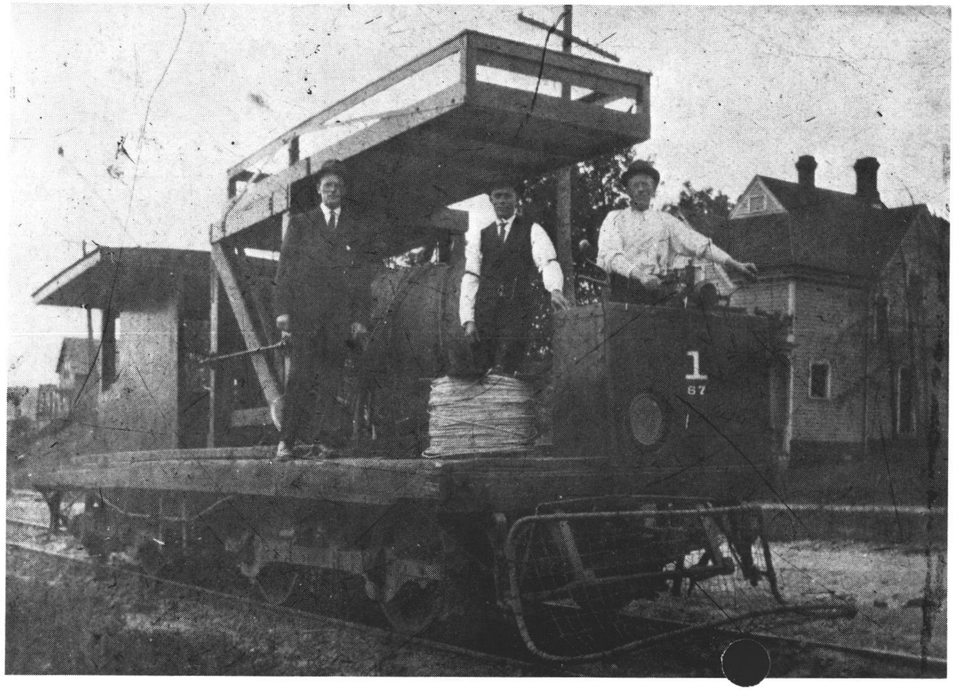


Above: Snow Plow 2 at the Duluth shops in 1916 after being freshly repainted.

Right: Tower Car 1 as originally built, with Bemis trucks.

Left: Another view of Tower Car 1 re-equipped with DSR trucks.

(All photographs Wayne C. Olsen collection)



the Billings Park, South Superior and Belknap line that year and the year following. Car 111 was similarly converted at approximately the same time. Both cars were retired and/or scrapped in 1912.

5.11 Supply car, single truck, single end, 88 group 108

Closely related to the flat car was the supply car which most street railways had in a much larger proportion (both single- and double-truck) than DSR, which had only three, all single-truck cars. Supply car 88 evolved from passenger car 31 which was partially destroyed in an 1895 fire. It was single-truck, single end, completely closed, 20' 5" long. Its two primary functions were that of hauling hose bridges to scenes of fires, and as a sand car for sanding rails on the "hill" lines in Duluth in the fall season when fallen leaves on the rails created a hazardous condition.

5.12 Other supply cars

Passenger car 62 was rebuilt as a supply car in 1915 and assigned to the Superior division.

Car 131 was the sole survivor of the 35 single-truck SRT cars (all originally narrow gauge), obtained in the 1900 merger, and most of which had been retired and disposed of by 1913. With little or no modification (except perhaps the removal of seats), it was assigned to the Superior division, and served until June 1931 as a general-purpose supply car, tower car, tow car, and for other miscellaneous duties.

5.13 Motorless gondola cars, single truck,unnumbered group 110

DSR had three unnumbered 15' 3" by 6' 2" by 3' 4" motorless gondola cars for varied uses in the shop areas, one in Superior and two in Duluth. These evolved in 1923 when passenger cars 47, 79 and line car 51 had their bodies removed, and their trucks then used to build gondola cars.

5.14 Roller, un-numbered

With the proliferation of automobile traffic, streets became dangerously rutted after each snow fall. In January 1928 DSR shops designed and built a unique device for reducing this hazard. cost $1271

The device consisted basically of a sand-filled steel cylinder, 7' long and 28" in diameter, and upon which were mounted hardened steel cleats (teeth) which chopped and broke the compacted snow and ice formations as the cylinder rolled along the street, but designed not to damage the street surface. The cylinder was mounted on a four-wheel carriage which was towed behind a snow plow (usually plow 4, because of its lesser rear overhang). A second plow usually, but not always, followed to clear the street of the chipped ice that the roller left in its wake.

Although a rail-mounted vehicle, the device did not bear a number. Nor is there a record that it had an official nomenclature. The operating department referred to it as "the roller", ~~and~~ the shop order called it an "ice breaker", the front office called it an "ice cutter", and the employees who used it referred to it as "Goliath".

5.15 Electric shovel, un-numbered

On streets in which there were street car tracks, DSR was sometimes called upon to prepare the street for paving or repaving. DSR's unnumbered electric shovel, purchased for $7,950 from Thew Electric Co. in April 1922, when used with portable tracks and company service cars, was well equipped for this type of work. Provided with both flanged and wide-tread wheels, the electric shovel was able to operate both on rails and off, and was also used in the company's gravel pits and bulk materials handling yards. It had a 1/3-yard capacity bucket.

5.16 Fire car (unnumbered)

DSR maintained an unusual car, provided a crew to operate it, and allowed the car to operate on its tracks---a car which it did not own!

Park Point developed into a year-round residential area after the building of the Aerial Bridge in 1905. By the very nature of its operation, the bridge caused some delay to fire-fighting equipment dispatched from the mainland. To provide some measure of early-action fire protection, the Duluth fire department arranged for the conversion of one of ITC's passenger cars into a fire car in 1907. It was originally one of four single-truck, double-end 9-bench, open trailer cars purchased from Brownell Car Co. in 1891 for operation on the then newly constructed Woodland Line. One of these four cars, car number 2, was removed from Woodland service in June 1893 (see 4.7), equipped with motors, controls and other electrical equipment, and put in interstate service by DSR. In about 1902 the car was sold to ITC for operation on The Point.

We can reasonably assume that this is the car that the Duluth fire department purchased from ITC on 8-14-07 for $650, and which ITC converted to a fire car. The conversion involved no structural changes in the car. It was equipped with ladders, hose, water pump and all other normally-associated fire-fighting equipment. ITC modified a former car house on the west side of Minnesota Ave. near the car house at 19th St. to house the car. (See 7. for operation of the car). The only markings on the car were DFD (Duluth Fire Department) on the dask below the headlight.

5.17 Park Point Flat Car

The Park Point line performed services not normally associated with street railway operation. Because of an almost complete lack of other forms of transportation, freight, fuel, household furnishings, building materials---even groceries---were delivered by trolley car. A motorless single truck flat car was utilized for this service until DSR acquired the line in 1917, at which time the service was terminated. The derelict retired car remained on the property until June 1931.

5.18 Sprinkler car

Duluth seems to have come close to having a sprinkler car, a service which many cities arranged with street railways for washing and sprinkling streets on which there were street railways tracks. In August 1902 DSR improvised such a device by placing two 1500-gallon tanks, sprinkler valves and other appurtenances on one of its double-truck flat cars to wet down the ballast on a track construction project. The same installation was utilized in July 1916. Although it demonstrated its apparently excellent temporary use for street sprinkling, no permanent use seems to have been made of this device in Duluth or Superior, even though Council by resolution in October 1904 (and at other times) ordered DSR to sprinkle streets upon which it had tracks.

5.19 Car colors

An order was issued on April 17, 1930 to paint all work cars and company trucks passenger car yellow. Management had determined that all equipment appearing on the street would then more readily be identified as that of DSR. The wrecker and single-truck work cars seem not to have received this treatment, and remained a dark green through all of their lifetime.

CONSTRUCTION AND DISPOSITION DATES

DULUTH STREET RAILWAY

TCRT-BUILT STANDARD PASSENGER CARS

QUANTITY	NUMBERS	CLASS	BUILT	Ex TCRT	REBUILT FRONT EXIT	REBUILT ONE-MAN	NOT REBUILT
12	151-162	B-3	1900	833-844			151-162
15	163-177	D-7	1904			163-177	
1	178	E-4	1905	1043		178	
4	179-182	E-4	1905	1108-1111		179-180	181-182
15	183-197	G-6	1906				183-197
6	198-203	I-1	1908			198-203	
11	204-214	J-2	1909			204-214	
5	215-219	K-8	1910			215-219	222,233, 235
16	222-237	K-8	1911			223-232,234,236-237	
4	238-241	K-8	1911	1482-1485		238-241	
10	242-251	L-8	1912			242-251	
3	252-254	L-8	1912	1564-1566		252-254	
6	257-262	L-8	1914				257-262
4	263-266	L-8	1915	1789-1792		265-266	263,264
4	267-270	L-8	1914	1724,19,16,22	268-270	268	267
8	271-278	L-8	1917		271-274,276-278		275
3	289-291	G-6	1906	1202,04,12			289-291
3	292-294	H-6	1907	1231,32,34			292-294
130 cars					10 cars	73 cars	48 cars

CLASS L-8 had the sliding motorman's cab door.

REBUILDING DATES:

FRONT EXI 1923 268-274,276-278

ONE-MAN:

Rear Door for Emergency Only:

1924	163,165-166	163 Double End 1934
1925	164,167	
1926	168-169,177	

Rear Door Treadle Operated

1928	170-176,178-180,210-213,215-219,244
1929	208,223-226,228-232,234,237-239,241-243,245-254,265
1930	198-207,209,214,227,236,240,266,268

DULUTH ST. RY.

SUMMARY

CAR NUMBER	QTY	YEAR IN SERVICE	WEIGHT	TRUCKS	WHEEL BASE	MOTORS	H.P. EA.	CONT.	GEAR RATIO	AIR COMP
52-57	2	1892	18,000	McGuire	7' 6"	SRG 30	15	K2	14:67	-
151-162	12	1901	44,140	Brill 01	5' 8"	GE 67	38	K6	15:67	AA1
163-177	15	1904	49,200	Brill 04	5' 8"	GE 70	40	K28A	15:71	AA1
178	1	1905	49,220	Bald. #1	6' 0"	GE 70	40	K28B	15:71	AA2
179-182	4	1906	49,220	Bald. #1	6' 0"	GE 70	40	K28B	15:71	AA2
183-197	15	1907	51,520	Bald. #5	6' 0"	GE 70	40	K28B	15:71	CP-21
198-203	6	1908	47,900	Bald. #5	6' 0"	GE 213	50	K37A	15:71	CP-21
204-214	11	1909	47,900	TCRT #5	6' 0"	GE 213	50	K37A	15:71	CP-21
215-219	5	1910	46,200	TCRT #6	6' 0"	GE 213	50	K37A	17:69	CP-21
222-237	16	1911	46,200	TCRT #6	6' 0"	GE 216	50	K37C	17:69	CP-27
238-241	4	1911	46,200	TCRT #6	6' 0"	GE 216	50	K37A	17:69	CP-27
242-254	13	1912	43,700	TCRT #8	6' 0"	GE 216	50	K37C	17:69	CP-27
255-256	2	1913	40,200	Twin City	5' 0"	GE 67	38	K6	15:67	AA1
257-262	6	1914	41,700	TCRT #9	5' 6"	GE 200	40	K43F2	15:66	CP-25
263	1	1916	41,700	TCRT #5	6' 0"	GE 213	50	K43F2	15:71	CP-25
264-265	2	1916	41,700	TCRT #6	6' 0"	GE 216	50	K43F2	17:69	CP-25
266	1	1916	41,700	Bald. #5	6' 0"	GE 70	40	K43F2	15:71	CP-25
267-278	12	1916-17	41,700	TCRT #9	5' 6"	GE 200	40	K43F2	15:66	CP-25
285-286	2	1905	40,600	StL. #47	4' 6"	GE 67	38	K10	15:69	AA1
287-288	2	1911	36,600	Brill27G1	4' 6"	GE 67	38	K10	15:69	AA4
289-294	6	1918	45,240	TCRT #9	5' 6"	GE 200	40	K43F2	15:66	CP-21
295-297	3	1919	13,300	Brill78M1	8' 0"	GE 258C	25	K63B	13:74	CP-25
298-300	3	1919	13,900	Brill78M1	8' 0"	GE 258C	25	K63B	13:74	CP-25
301-305	5	1925	24,200	TCRT #12	4' 6"	GE 258K	25	K28	15:72	CP-25

Duluth Street Railway Car Weights from 1932 Data Sheets

One Man Cars

17 cars	163-168,170-180	48,300 lbs
16 cars	198-203,210-213,215-219,244	49,600 lbs
39 cars	204-209,214,223-232,234,236-243,245-254,265,266,268	48,900 lbs
2 cars	255-256	40,200 lbs
3 cars	295-297	13,300 lbs
3 cars	298-300	13.900 lbs
5 cars	301-305	24,200 lbs

Two Man Cars

2 cars	181-182	Not stated
21 cars	183-197,289-294	48,000 lbs
12 cars	222,233,235,257-263,267,275	44,000 lbs
9 cars	269-274,276-278 (Front Exit)	44,000 lbs

DSR Car #	Date Built	TCRT Car #	Date Sold	Rebuilt Frt.Exit	Rebuilt One-Man	Rebuilt Dbl.End	Disposition	
151	8/9-1900	I 833	1901				BS 5-31	
152	8/9-1900	I 834	1901				BS 4-31	
153	8/9-1900	I 835	1901				BS 5-31	
154	8/9-1900	I 836	1901				BS 3-31	
155	8/9-1900	I 837	1901				BS 5-31	
156	8/9-1900	I 838	1901				BS 4-31	
157	8/9-1900	I 839	1901				BS 5-31	
158	8/9-1900	I 840	1901				BS 5-31	
159	8/9-1900	I 841	1901				BS 5-31	
160	8/9-1900	I 842	1901				BS 5-31	
161	8/9-1900	I 843	1901				BS 3-31	
162	8/9-1900	I 844	1901				BS 4-31	
63	11-??-01						BS ?-11	
163	4-??-04				8-26-24	10-08-34	DB ?-39	(Retired 7-39)
164	4-29-04				8-24-25		BS 10-37	
165	4-30-04				8-26-24		BS 11-37	
166	5-01-04				8-28-24		BS 7-38	
167	5-02-04				8-24-25		BS 11-37	
168	5-10-04				1-29-26		BS 2-38	
169	5-12-04				1-30-26		AD 1-6-27	
170	5-15-04				2-18-28		BS 5-39	
171	5-16-04				2-18-28		DB ?-39	(Retired 1-39)
172	5-20-04				3-20-28		BS 3-39	
173	5-30-04				3-20-28		BS 5-39	
174	6-10-04				4-10-28		BS 3-39	
175	6-15-04				4-10-28		BS 3-39	
176	6-??-04				5-03-28		BS 4-39	
177	6-30-04				6-26-26		BS 2-38	
178	2-13-05	I1043	2-23-05		5-03-28		BS 6-39	
179	6-15-05	1111	8-24-05		5-31-28		BS 4-39	
180	6-06-05	1108	6-16-06		6-02-28		BS 5-39	
181	6-08-05	1109	6-16-06				BS 6-35	
182	6-10-05	1110	6-16-06				BS 4-35	
183	9-03-06						BS 6-35	
184	9-05-06						DB ?-35	(Retired 7-34)
185	9-07-06						BS 5-35	
186	9-09-06						BS 8-35	
187	9-11-06						BS 10-35	
188	9-13-06						DB ?-35	(Retired 9-35)
189	9-15-06						BS 6-35	
190	9-17-06						BS 7-35	
191	10-11-06						BS 6-35	
192	10-15-06						BS 9-35	
193	10-17-06						BS 6-35	
194	11-02-06						BS 5-35	
195	11-04-06						BS 6-35	
196	11-10-06						BS 6-35	
197	11-15-06						BS 5-35	

DSR Car #	Date Built	TCRT Car #	Date Sold	Rebuilt Frt.Exit	Rebuilt One-Man	Rebuilt Dbl.End	Disposition
198	3-10-08				5-29-30		BS 5-39
199	3-10-08				5-29-30		BS 5-39
200	3-16-08				4-12-30		BS 5-39
201	3-27-08				5-06-30		BS 6-39
202	4-10-08				4-12-30		BS 7-39
203	5-10-08				3-20-30		BS 6-39
204	6-09-09				3-20-30		BS 8-39
205	6-09-09				8-30-30		BS 7-39
206	6-09-09				5-06-30		BS 6-40
207	6-10-09				7-31-30		BS 6-39
208	6-11-09				10-31-29		BS 8-39
209	6-14-09				6-27-30		BS 7-39
210	6-15-09				10-18-28		BS 11-40
211	6-16-09				11-13-28		BS 6-39
212	6-18-09				11-13-28		BS 7-39
213	6-21-09				9-09-28		BS 7-40
214	6-23-09				7-31-30		BS 8-40
215	5-26-10				9-02-28		BS 8-39
216	5-28-10				9-09-28		BS 9-39
217	6-03-10				12-17-28		BS 9-40
218	6-04-10				12-17-28		BS 4-39
219	6-06-10				9-02-28		DB 11-40
220	3-15-11						SS 9-39 W.E. I&M Co.
221	3-15-11						SS 9-39 W.E. I&M Co.
222	5-23-11						BS 5-36
223	5-25-11				3-10-29		BS 6-40
224	5-31-11				12-07-29		BS 8-39
225	6-02-11				10-31-29		BS 9-39
226	6-06-11				6-12-29		BS 6-40
227	6-08-11				1-31-30		BS 7-40
228	6-09-11				12-28-29		BS 2-40
229	6-10-11				9-16-29		BS 2-40
230	6-15-11				12-28-29		BS 4-39
231	6-17-11				7-03-29		BS 6-40
232	6-19-11				6-12-29		BS 9-39
233	6-20-11						BS 6-36
234	6-21-11				2-13-29		BS 5-39
235	6-23-11						BS 4-36
236	6-24-11				6-27-30		BS 7-39
237	6-24-11				4-02-29		BS 6-39
238	2-16-11	I1482	6-28-11		12-07-29		BS 9-40
239	2-18-11	I1483	6-28-11		8-23-29		BS 4-40
240	2-18-11	I1484	6-28-11		2-22-30		DB 11-40
241	2-18-11	I1485	6-29-11		2-13-29		BS 4-39
242	5-24-12				10-08-29		BS 8-40
243	5-27-12				7-05-29		BS 12-39
244	5-28-12				10-18-28		BS 4-40

DSR Car #	Date Built	TCRT Car #	Date Sold	Rebuilt Frt.Exit	Rebuilt One-Man	Rebuilt Dbl.End	Disposition
245	8-02-12				3-30-29		BS 7-39
246	8-04-12				10-08-29		BS 2-40
247	8-06-12				4-20-29		BS 8-40
248	8-07-12				7-25-29		DB 7-11-39
249	8-09-12				5-15-29		BS 6-40
250	8-11-12				4-20-29		BS 7-39
251	8-11-12				7-25-29		BS 6-40
252	8-11-12	I1564	11-13-12		3-14-29		BS 7-39
253	8-12-12	I1565	11-13-12		8-23-29		BS 9-40
254	8-26-12	I1566	11-13-12		5-15-29		BS 10-39
255	2-02-01	868	12-19-12			12-19-12	BS 1939 (Retired 9-39)
256	5-28-01	869	12-19-12			12-19-12	BS 1939 (Retired 9-39)
257	9-24-14						BS 3-36
258	9-24-14						BS 4-36
259	9-24-14						BS 3-36
260	9-24-14						BS 4-36
261	9-24-14						BS 10-35
262	9-24-14						BS 6-36
263	12-18-15	I1789	5-13-16				BS 3-36
264	12-18-15	I1790	5-13-16				AD 9-21-17
265	12-18-15	I1791	5-13-16		9-16-29		BS 9-39
266	12-18-15	I1792	5-13-16		2-22-30		BS 8-39
267	12-08-14	I1724	7-27-16				BS 6-36
268	11-30-14	I1719	7-27-16	11-23	1-31-30		CS 6-39 DM&IR RR $1200
269	11-25-14	I1716	7-27-16	11-23			BS 5-35
270	12-05-14	I1722	7-27-16	11-23			BS 10-34
271	6-01-17			10-23			BS 9-35
272	6-01-17			11-23			BS 6-35
273	5-21-17			10-23			BS 8-35
274	5-21-17			10-23			BS 5-35
275	6-01-17						BS 6-35
276	6-01-17			10-23			BS 10-35
277	6-01-17			11-23			BS 8-35
278	6-01-17			11-23			BS 8-35
279-284 were TCRT 1672,988-991,1673 leased from 12-24-17 to 10-19-20.							
285-288 were Park Point Traction Co. 10-11,20-21 acquired 9-1-17.							BS 7-31 (285-87) BS 6-31 (288)
289	12-04-06	1202	10-20-18				BS 6-36
290	12-03-06	1204	10-20-18				BS 7-36
291	11-23-06	1212	10-20-18				BS 7-36
292	3-08-07	1231	10-20-18				BS 7-36
293	3-08-07	1232	10-20-18				BS 6-36
294	3-15-07	1234	10-20-18				BS 7-36

DSR Car #	Date Built	TCRT Car #	Date Sold	Rebuilt Frt.Exit	Rebuilt One-Man	Rebuilt Dbl.End	Disposition
Single Truck Birney Cars built by American Car Co.:							
295	9-19	Order # 1213					BS 4-38
296	9-19						BS 3-38
297	9-19						DB 1938
298	9-19	Order # 1214					BS 10-38
299	9-19						BS 10-38
300	9-19						BS 11-38
Lightweight Cars built by Lightweight Noiseless Electric Street Car Co.:							
301	4-25						BS 4-38
302	4-25						BS 4-38
303	4-25						BS 3-38
304	4-25						BS 6-38
305	4-25						BS 6-38
Single Truck Closed Cars built by LaClede Car Co.; Rebuilt Double End by DSR:							
52	5/7-92					6-22-19	BS 7-31
57	5/7-92					5-16-19	BS 7-31
Snow Plow built by TCRT:							
4/146	11-10-17						DB 1940

Abbreviations used:

BS	Body Sold
DB	Dismantled and Burned
AD	Accident Damage (Destroyed in Wreck)
SS	Sold for Scrap
CS	Car Sold Complete

Supplemental Information

264 was wrecked September 21, 1917, on the C.StP.M.&O. Ry. croosing at 13th St. and Hill Ave. in Superior.

164 was wrecked January 6, 1927, when it was rammed broadside by the G.N. Ry.'s "Gopher" passenger train at the 21st St. crossing in Superior. Five streetcar passengers and the locomotive fireman were killed.

220-221 were sold for scrap to the West End Iron & Metal Co. in 1939.

248 was dismantled and burned in the carhouse yeard. It was the last streetcar to operate in Duluth and was completely stripped by souvenir hunters.

268 was sold complete to the D.M.&I.R. RR in June; it became their diesel-electric motor car W56.

National® Brand 45-606 Eye-Ease® 45-306 2 - Pack Made in USA

Duluth St Ry
Car Disposition Dates

-1-

	Initials	Date
Prepared By		
Approved By		

	Other Disposition		Body Sold			
Car #	Description	Date	Date	To	Price	Date Retired
151	(Trolley Cafe, Cromwell, Minn) →		5-31	E. E. Hallett	90 –	12-30
152			4-31	Percy Halloway	75 –	
153			5-31	Martin Christiansen	90 –	
154			3-31	J. D. Mahoney	45 –	
155			5-31	Roy B. Lewis	75 –	
156			4-31	Wm. E. Pugh	80 –	
157			5-31	Oscar E. Anderson	75 –	
158	(Trolley Cafe, Cromwell, Minn) →			E. E. Hallett	90 –	
159				Joseph Zacher	75 –	
160				Roy B. Lewis	75 –	
161			3-31	R. J. Gray	80 –	
162			4-31	John Shields	90 –	
163	?		–	–	–	7-39
164			10-37	John Hendrickson	85 –	8-37
165			11-37	John O. Block	85 –	
166			7-38	Victor Thompson	60 –	
167			11-37	Gordon O. Peterson	80 –	
168			2-38	Nellie Nelson	95 –	
169	Wrecked in Superior and Scrapped	1-6-27	–	–	–	–
170			5-39	C. Arneson	75 –	1-39
171	?			?		
172			3-39	Mike Blin	75 –	
173			5-39	V. Thompson	60 –	
174			3-39	Mike Valencia	75 –	
175			3-39	Nick Meyerson	75 –	
176			4-39	George McDonald	75 –	
177			2-38	L. V. Lindquist	95 –	8-37
178			6-39	H. Huttel	60 –	1-39
179			4-39	Gunard Carlson	75 –	
180			5-39	E. Erickson	75 –	1935 ? 1-39
181			6-35	Henry Keixling	50 –	7-34
182			4-35	Robert B. Thompson	60 –	
183			6-35	John Vorhees	75 –	
184	?			?		
185			5-35	Emil Garaxha	75 –	
186			8-35	Matt Jacobson	85 –	
187			10-35	J. M. Iverson	75 –	9-35
188	?			?		
189			6-35	G. A. Anderson	85 –	(Sic)
190			7-35	Charles G. Johnson	85 –	(Sic)

National® Brand 45-606 Eye-Ease® 45-306 2 - Pack Made in USA

Duluth St. Ry.

Car Disposition Dates

-2-

	Initials	Date
Prepared By		
Approved By		

Car #	Other Disposition		Body Sold		Price	Date Retired
	Description	Date	Date	To		
191			6-35	Robert Besser	80—	9-35 (sic)
192			9-35	John Aho	75—	}
193			6-35	Oscar Johnson	30—	}
194			5-35	C. C. Barby	80—	}
195			6-35	Mrs. W. M. Linde	75—	}
196			}	Mrs. Lilly Spindler	80—	}
197			5-35	Hjalmar Johnson	80—	}
198	DSR 5-35 which is wrong		5-39	W. R. Collett	85—	4-39
199			5-39	F. D. Kerslake (sp?)	85—	}
200			}	W. B. Joyce	85—	}
201			6-39	A. Johnson	85—	}
202			7-39	Gordon Zendel	85—	7-39
203			6-39	V. A. Young	60—	6-39
204			8-39	Harry Huber	85—	7-39
205			7-39	John La Fleur	85—	}
206			6-40	J. L. Pemberton	85—	}
207			6-39	A. Johnson	85—	}
208			8-39	A. Martineau	85—	}
209			7-39	Fred Harris	85—	}
210			11-40	Matt Carpenter	65—	4-39
211			6-39	M. Anderson	85—	}
212			7-39	Albert M. Borup	85—	}
213			7-40	Paul Riga	65—	}
214			8-40	Amil Vo----?	65—	7-39
215			8-39	C. J. Midlam	85—	4-39
216			9-39	A. C. Diettrich	60—	}
217			9-40	A. Ostrander	50—	}
218			4-39	C. A. Johnson	85—	}
219	Scrapped in Yard	11-40				}
220	Incline Car Sold for scrap		9-39	West End Iron & Metal Co.	200—	9-39
221	} } } }		}	} } } }	200—	}
222			5-36	Herman Kuhes	85—	3-36
223			6-40	A. E. Lamprecht	85—	7-39
224			8-39	Harry Huber	85—	}
225			9-39	E. Lundholm	85—	}
226			6-40	R. Johnson	65—	}
227			7-40	W. A. Moodie	85—	}
228			2-40	J. L. Trapp	85—	}
229			2-40	Arne Froke (sp?)	85—	}
230			4-39	H. L. Davis	85—	4-39

National® Brand 45-606 Eye-Ease® 45-306 2-Pack Made in USA

Duluth St. Ry.

Car Disposition Dates

-3-

	Initials	Date
Prepared By		
Approved By		

	Car #	Other Disposition Description	Other Disposition Date	Body Sold Date	Body Sold To	Price	Date Retired	
1	231			6-40	Ruth Taffan	60–	7-39	1
2	232			9-39	J. Sage	85–	〃	2
3	233			6-36	Emil Jarvi	60–	3-36	3
4	234			5-39	S. L. Johnson	85–	4-39	4
5	235			4-36	Lee E. Coutier	85–	3-36	5
6	236			7-39	Eileen Beaudry (sp?)	85–	7-39	6
7	237			6-39	A. J. McDowell	85–	〃	7
8	238			9-40	A. Fichtner	85–	〃	8
9	239			4-40	C. Rasmussen	85–	〃	9
10	240	Scrapped in Yard	11-40				〃	10
11	241			4-39	J. N. Nystrom	85–	4-39	11
12	242			8-40	Amil Vo--- ?	65–	7-39	12
13	243			12-39	D. W. Stewart	85–	〃	13
14	244			4-40	S. Secarea	65–	4-39	14
15	245			7-39	V. A Young	30–	7-39	15
16	246			2-40	Wm. Preston	85–	〃	16
17	247			8-40	Walter Blacktop	65–	〃	17
18	248	Burned at Yard	7-11-39				〃	18
19	249			6-40	F. Lukkonen	85–	〃	19
20	250			7-39	John Hitzeberg	85–	〃	20
21	251			6-40	H. C. Frye	85–	〃	21
22	252			7-39	John Rones	85–	〃	22
23	253			9-40	A. Rehbein	85–	〃	23
24	254			10-39	A. Takkonen	85–	〃	24
25	255				?		9-39	25
26	256				?		〃	26
27	257			3-36	Joe Hassett	85–	3-36	27
28	258			4-36	Arnold E. Engberg	85–	〃	28
29	259			3-36	Paul Magnusson	85–	〃	29
30	260			4-36	Emma Goodbar	85–	〃	30
31	261			10-35	J. M. Iverson	75–	9-35	31
32	262			6-36	Hattie Pond	85–	3-36	32
33	263			3-36	Nick Beloshapka	85–	〃	33
34	264	Wrecked-Superior	9-21-17	–	–	–	1917	34
35	265			9-39	J. Hendry (sp?)	85–	7-39	35
36	266			8-39	R. Valentine	85–	〃	36
37	267			6-36	Alcide Le May	85–	3-36	37
38	268	Sold Complete DM&IR Ry.		6-39		1200–	6-39	38
39	269			5-35	F. A. Griffin	60–	7-34	39
40	270			10-34	College St. Scholastica	?	〃	40

PV118ED AVERY™

National® Brand 45-606 Eye-Ease® 45-306 2-Pack Made in USA

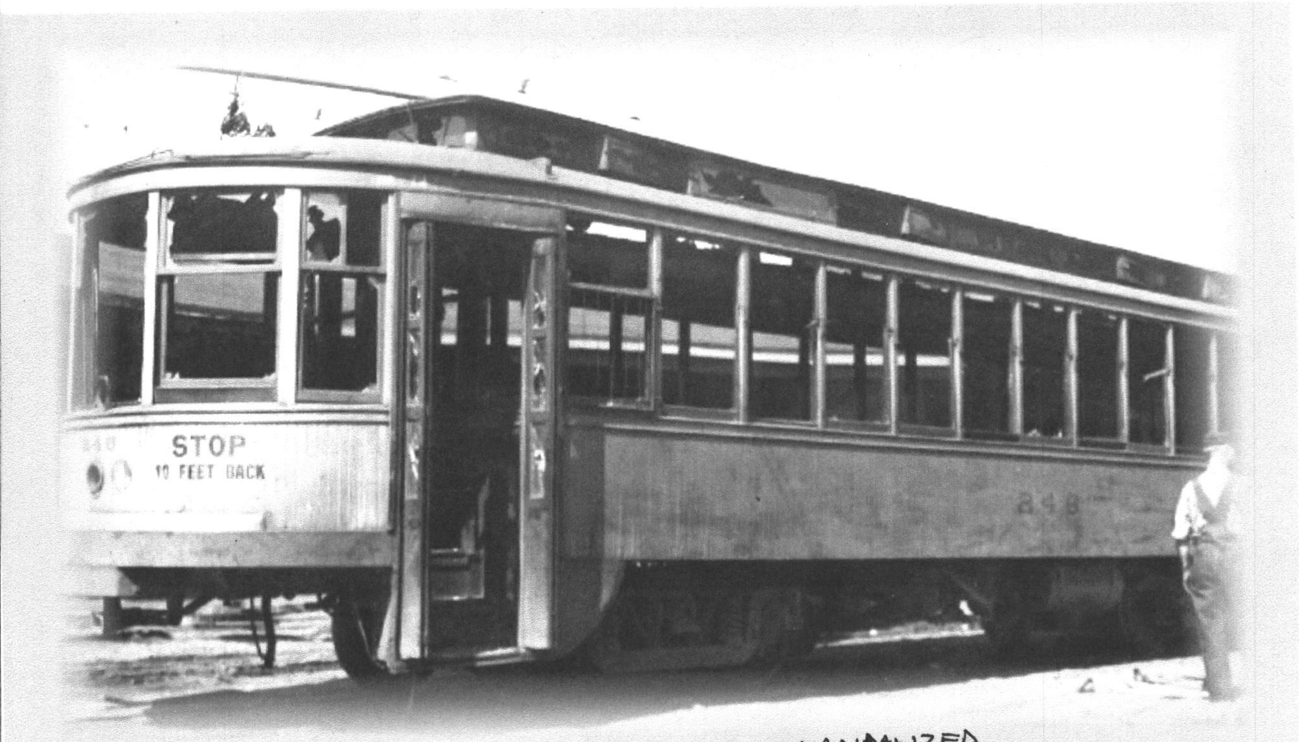
Duluth St. Ry.

Car Disposition Dates

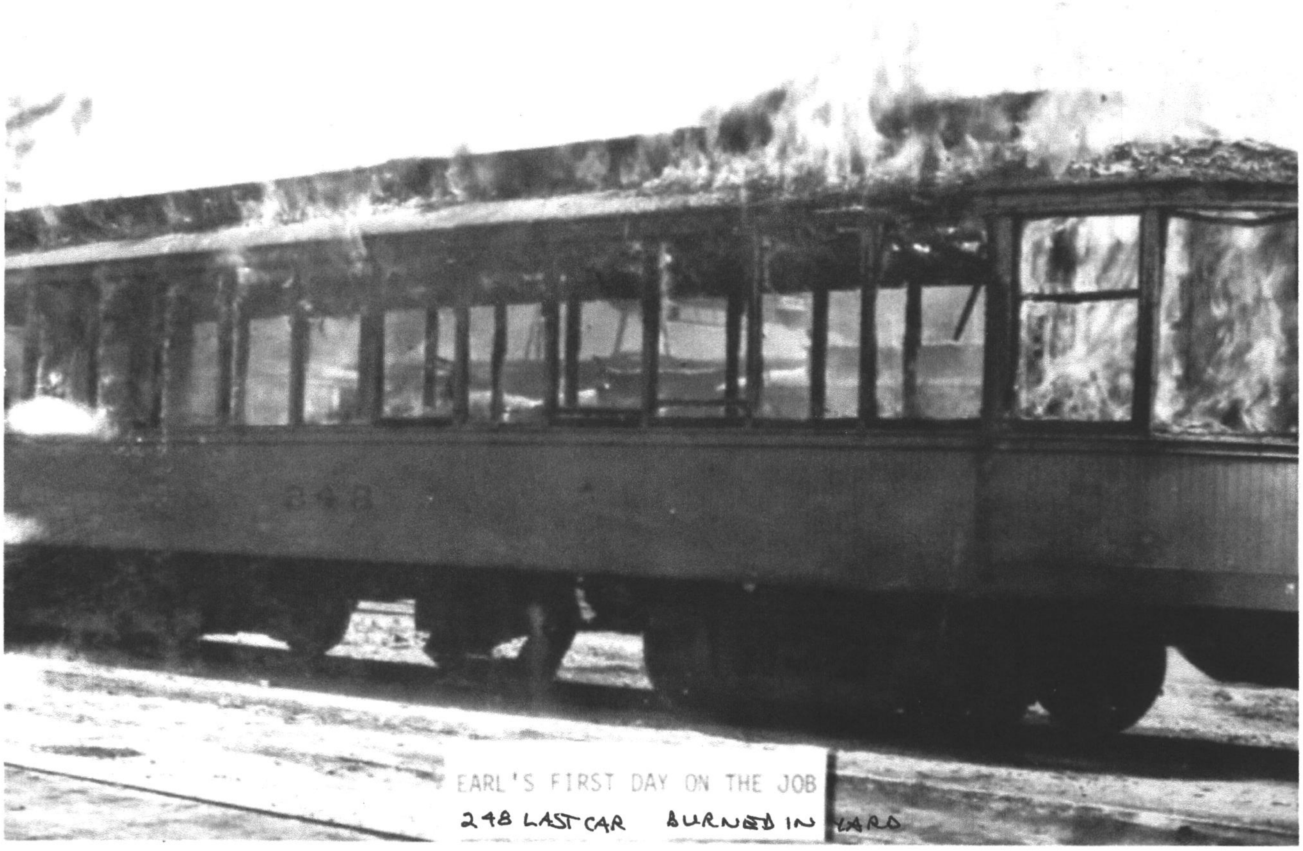
	Initials	Date
Prepared By		
Approved By		

Car #	Other Disposition Description	Other Disposition Date	Body Sold Date	Body Sold To	Price	Date Retired
271			9-35	J. E. Hakala	80 —	7-34
272			6-35	Mrs. Wm. Linde	75 —	〃
273			8-35	L. J. Verville (Ap?)	70 —	〃
274			5-35	John O. Dahlstrom	65 —	〃
275			6-35	W. C. Wakefield	80 —	9-35 (Acd)
276			10-35	J. M. Iverson	75 —	7-34
277			8-35	W. F. Moreman	75 —	〃
278			8-35	W. F. Moreman	75 —	〃
279-284	Returned to TCRT	10-11-20				
285			7-31	John Holter	100 —	6-31
286			〃	A. Nyman	100 —	〃
287			〃	Miss D. Wenneby	100 —	〃
288			6-31	Nora Dow	90 —	〃
289			6-36	Felix Gleason	85 —	5-36
290			7-36	Fred E. Hanson	85 —	〃
291			〃	John Shosie	85 —	〃
292			〃	Dale Henning	60 —	〃
293			6-36	Jacob E. Laine	85 —	〃
294			7-36	Irene Jonson	85 —	〃
295			4-38	Alfred Lind	60 —	3-38
296			3-38	Archie Hakes	70 —	〃
297			?	?		〃
298			10-38	Frank Follette	37 50	〃
299			〃	〃 〃	37 50	〃
300			11-38	A. H. Fagan	45 —	〃
301			4-38	Louis Oxlund	85 —	3-38
302			〃	Guido Marvello	85 —	〃
303			3-38	Herman Johnson	85 —	〃
304			6-38	J. C. Shield	85 —	〃
305			〃	〃 〃	85 —	〃
52			7-31	Thomas Weistin	35 —	1931
57			〃	L. Dahlgren	40 —	〃

AVERY® PV119ED

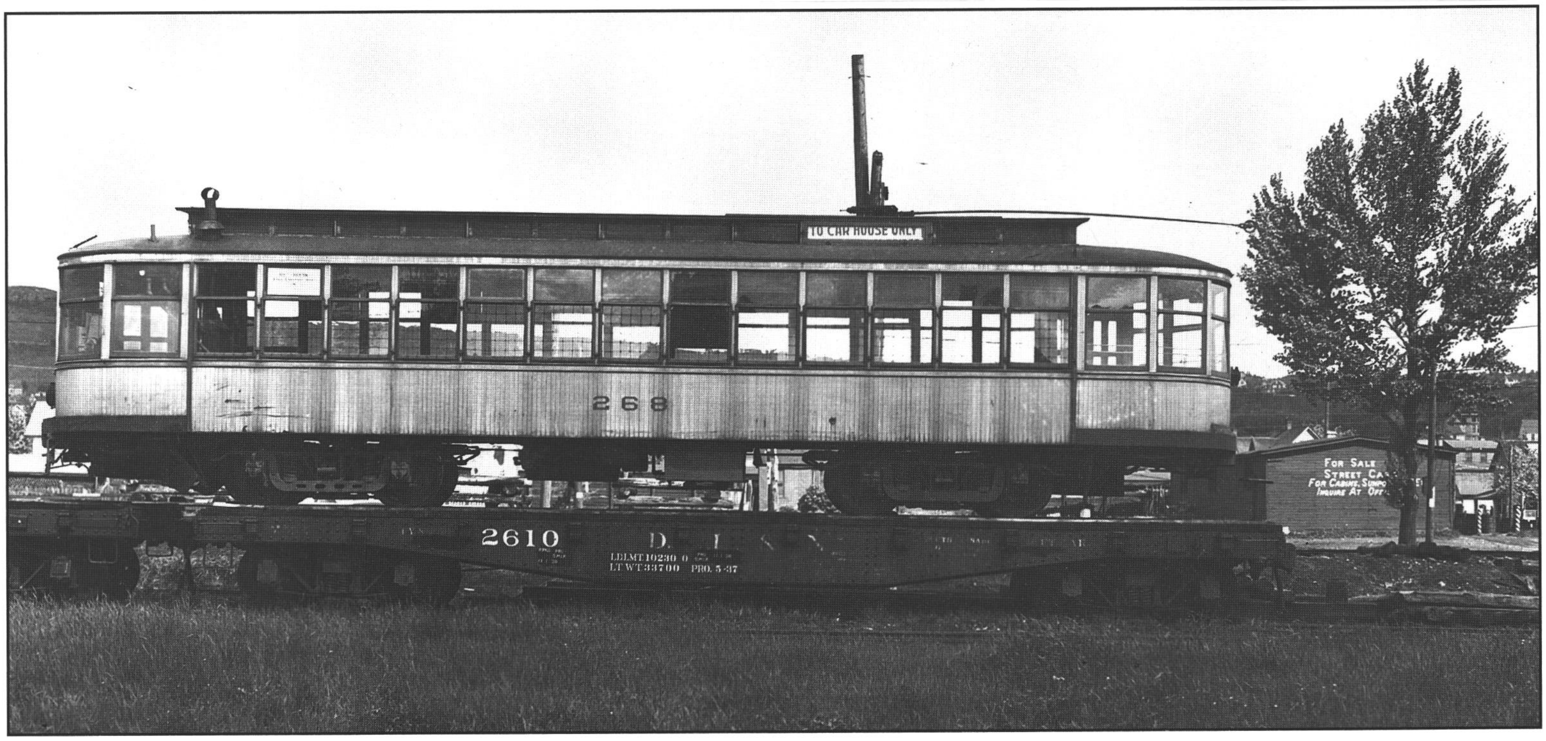

STOP
10 FEET BACK
248

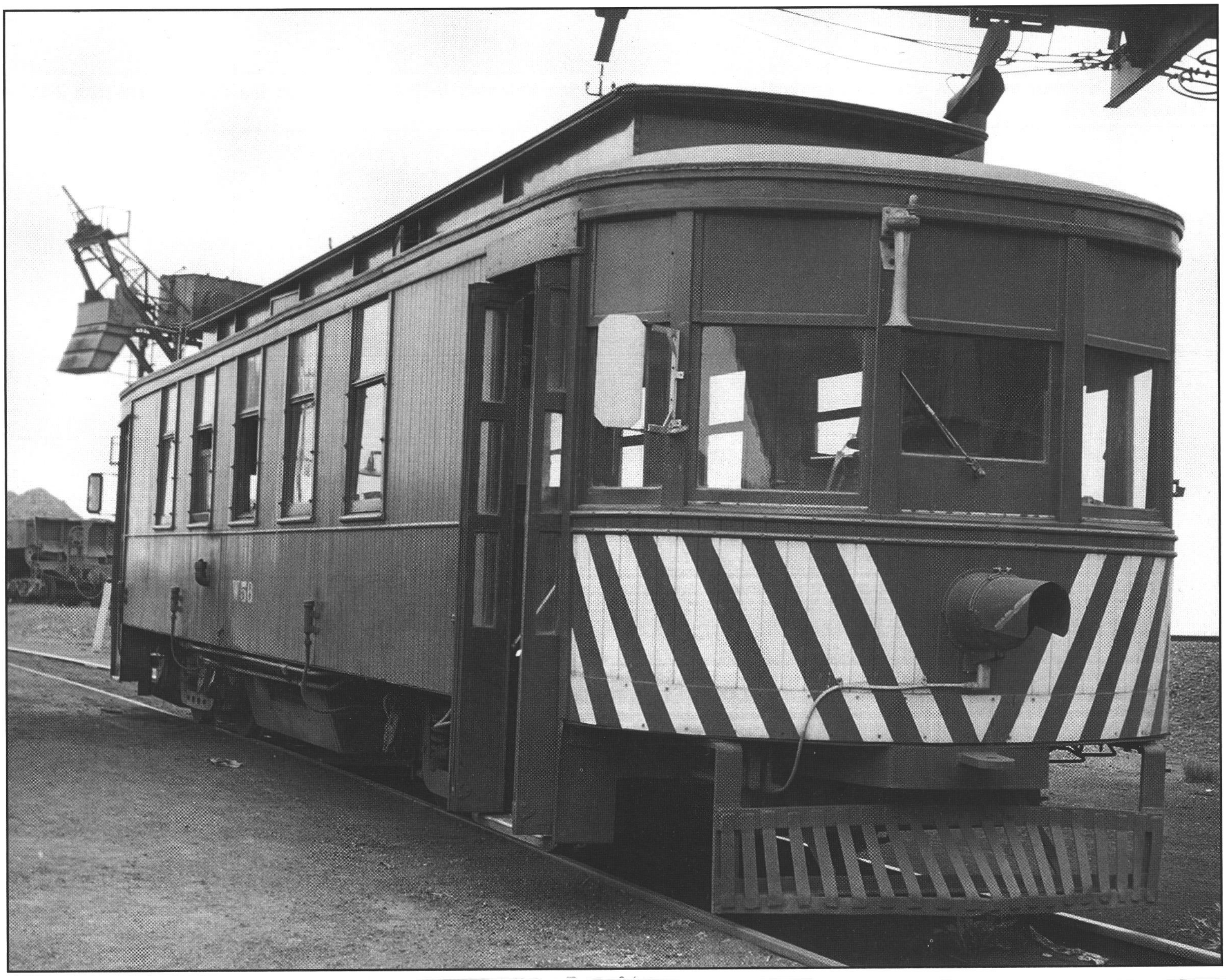
LAST CAR 248 VANDALIZED

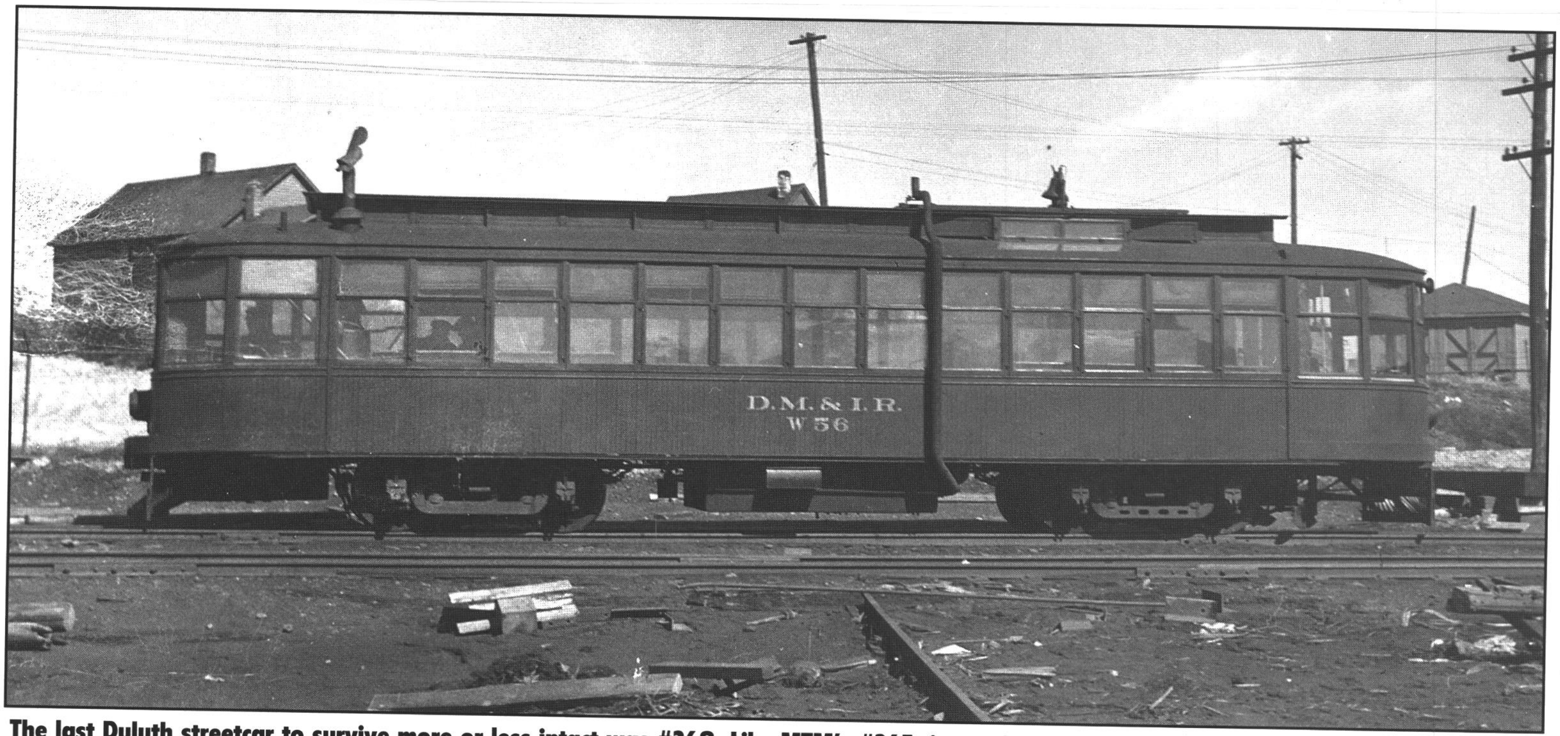


EARL'S FIRST DAY ON THE JOB

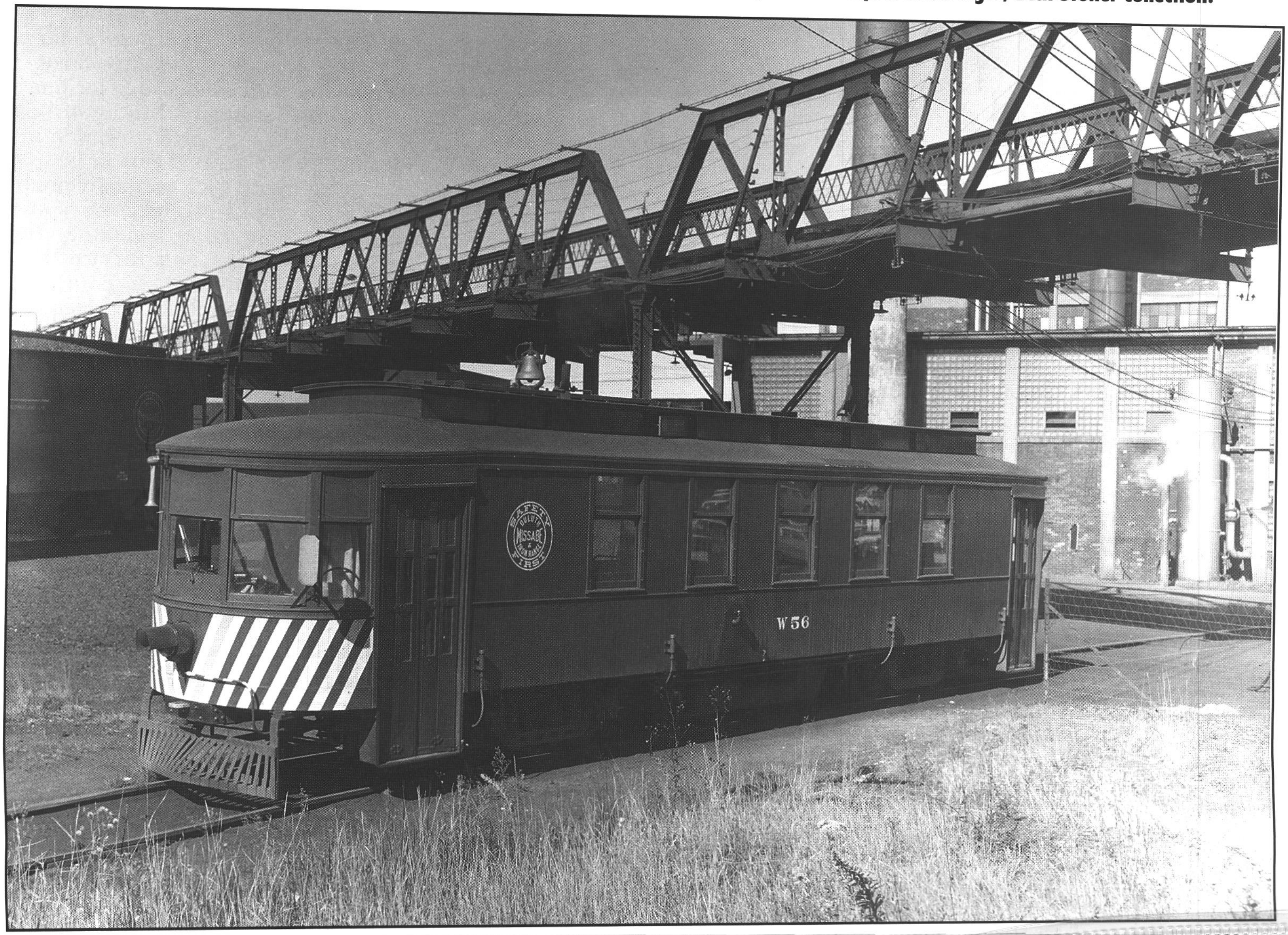
248 LAST CAR BURNED IN YARD


TO CAR HOUSE ONLY
268
2610
LD LMT 10230 0
LT WT 33700 PRO. 5-37
FOR SALE
STREET CA
INQUIRE AT OFF

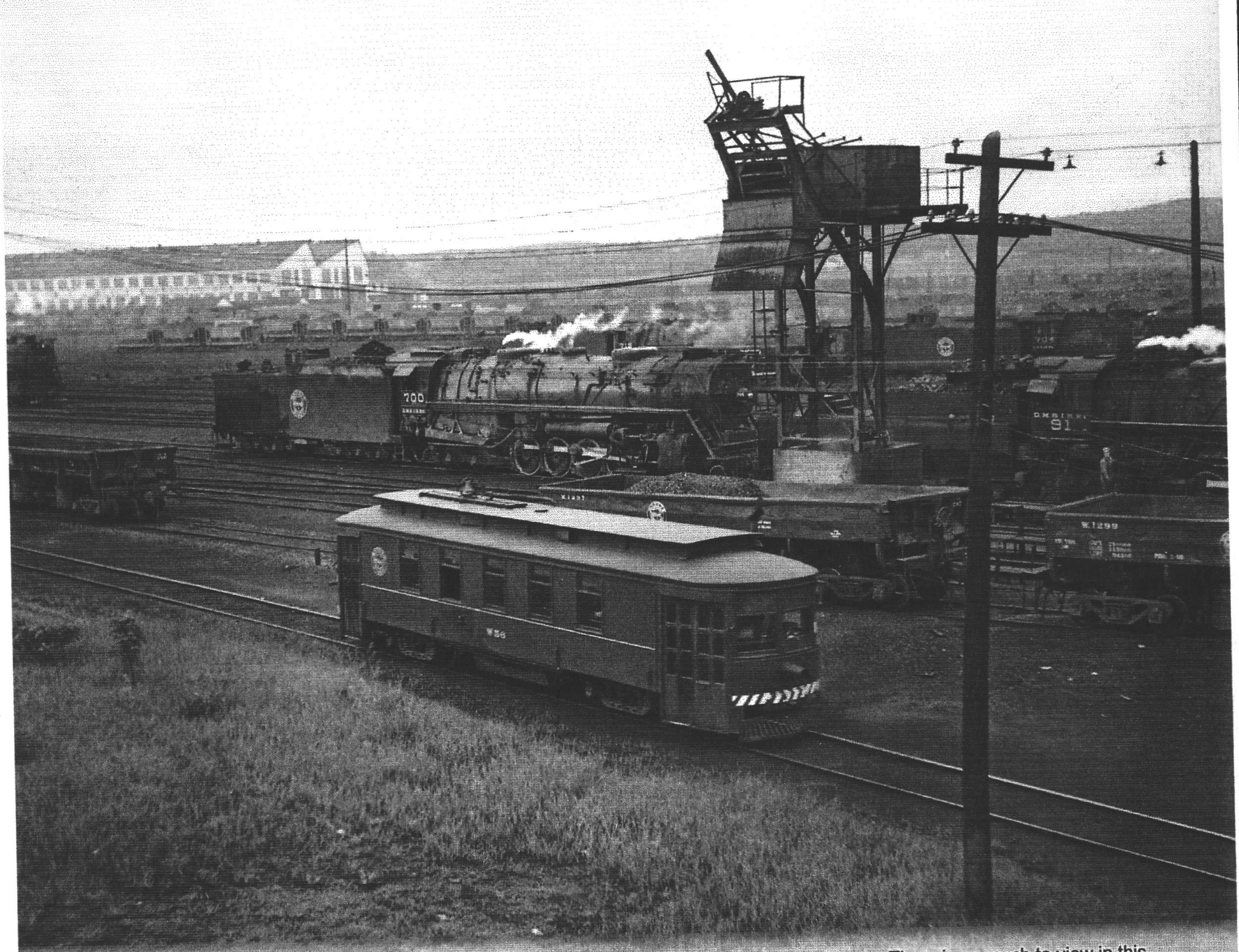

W58



The last Duluth streetcar to survive more or less intact was #268. Like MTM's #265, it was built for TCRT and sent to Duluth in 1916. Despite its higher number, it was actually built a year earlier than #265, in 1914. The top left photo shows it at the Duluth carhouse, after being sold to the Duluth, Missabe & Iron Range in 1939. Note the sign advertising streetcar bodies for sale at far right. DM&IR converted it to diesel-electric #W56, used to shuttle crews around the extensive Proctor yards. Painted Pullman green, the car was later rebuilt with half the windows covered over. It remained in service until scrapped in the 1960's. All photos except bottom right, Dick Stoner collection.



Whatever Happened to W-56?



Above: There is so much to view in this image taken by Bruce Meyer on July 1, 1955 as W-56 rolls past the ash pit near the north roundhouse in Proctor. *—MRHS Archives, Bruce Meyer collection*

by David Schauer & Gene Clark

A number of our members also have an interest in the streetcar and interurban systems of northeastern Minnesota. One of the more interesting links between the DM&IR and the streetcar history of the region could be found in converted Duluth Street Railway Company car 268, known universally to Missabe fans for working the "Jitney" assignment that connected the south shops and north roundhouse facilities in Proctor. Archives Chair Gene Clark was able to uncover additional information on W-56 (its DM&IR designation).

W-56 was purchased from the Duluth-Superior Transit Co. on June 9, 1939 as streetcar 268 "less seats, plus an extra truck with motors and trucks to be overhauled and put in first class condition" (ref: AFE No. 3996). The purchase price was $1,200.00 FOB Duluth. The total appropriation was $8,922.00 for the purchase and miscellaneous parts needed for the Proctor shops to convert it to W-56 by installing diesel electric equipment. The car W-56 was replacing, W-55, was to be held as an emergency unit and no disposal of it was made at that time.

An equipment diagram of the W-56 dated August 5, 1955 states that it was equipped with four 40 hp GE railway motors, No. 200 600V mounted on truck axles. The unit had one diesel GM engine Model 6-71 motor, 116 hp, 1800 rpm and one GE generator model SGT 1503 E1 300V.

On September 24, 1962 the W-56 was retired as "beyond economical repair" (ref: AFE #9349). The car was sold for $900.00 to a Mr. Whalen (Interstate G.M. Diesel, Minneapolis, Minnesota). The sale included a spare engine, spare trucks including traction motors and miscellaneous parts. A letter noted that Mr. Whalen was negotiating with West End Iron & Metal on scrapping arrangements. On December 27, 1962 a letter was written to take the W-56 off the roster and to confirm W-56 was sold. The letter also stated that W-56 had been dismantled at Proctor and the metal parts, including the motor, were removed as of December 26, 1962.

TRUCKS, MOTORS, AND CONTROLLERS

DULUTH ST. RY.

CHANGING TRUCKS, MOTORS AND CONTROLLERS

INTRODUCTION

Twin City Rapid Transit Co. over the years engaged in extensive upgrading and changing the electrical and mechanical equipment between groups of cars as well as individual cars. After completing a more wide-ranging study of such TCRT activities, I began to wonder what Duluth St. Ry. may have done since they were managed by TCRT officials.

Jim Kreuzberger supplied me with copies of DSR Mechanical Dept. equipment inventories dated in
September,1918 (referred to as 9-18),
January,1924 (referred to as 1-24) (November, 1923 was identical, produced just after the last original single truck passenger cars except 52 and 57 had been removed from service and retired),
May,1928 (referred to as 5-28),
February,1930 (referred to as 2-30),
October,1932 (referred to as 10-32), and
July,1935 (referred to as 7-35).
In addition there were Motor Lists dated in November,1930 and November,1936. A lengthy analysis of these plates and lists resulted in the attached two reports, one in chronological order, the other by groups of cars as built. Comments based on these reports and other information are next presented.

COMMENTS

Photographs indicate that on DSR cars, Brill 01 and Brill 04 trucks were all Brill 27-A2. On TCRT Brill 01 trucks were Brill 27-A2 while Brill 04 trucks were Brill 27-E2.

TCRT Mechanical Dept. record cards for DSR 215-219 list them with G.E. 216 motors, but all DSR Mechanical Dept. records list them with G.E. 213 motors.

TCRT construction journals record a shipment in December, 1907, to DSR of one set of Baldwin #3 trucks with G.E. 87 motors (60 h.p. each). The only mention of this in DSR records does not occur until October,1932, when the truck designation on Snow Plow 4/146 was changed to Baldwin #3 from Baldwin #4. (The July,1935 record also shows Baldwin #3.) On TCRT, almost all Baldwin #4 trucks were Baldwin #3 modified to accept G. E. 73 motors (75 h.p. each), and after 1911-1912 the #3 designation disappears, being replaced by #4.

Early photographs of Work Flats 1/64 and 2/65 show them with a truck design that I associate with the term DSR Trucks. When these two cars subsequently received Twin City Work Car trucks, photographs indicate one set of DSR trucks was installed on Tower Car 1/67. I don't know if DSR shops in those early years had the capability of manufacturing such trucks. As apparently only two DSR service cars originally had these trucks it would suggest they were purchased from an outside truck manufacturer. Twin City Work Car trucks are also always referred to as DSR trucks in DSR records. I don't know if DSR purchased these trucks from TCRT or could have manufactured them from TCRT plans. On TCRT, Twin City Work Car trucks had outside hung brakes and were used on service cars built from 1904 thru 1907. On TCRT, Twin City #7 trucks

(DSR Trucks had a 6'0" wheelbase.)

were identical to Twin City Work Car trucks except for having inside hung brakes and were used on service cars built from 1911 thru 1914. Based on photographs it appears that all such trucks on DSR had outside hung brakes regardless of dates.

In the attached two reports I have used the same system of abbreviations I used in the TCRT study. Illustrative examples for explanation follow.

Brill27A2/4GE70/K28B means two Brill 27-A2 trucks, 4 General Electric 70 motors, and one K-28-B controller.

BLW5/4GE213/K37A means two Baldwin Locomotive Works (Baldwin) #5 trucks, four General Electric 213 motors, and one K-37-A controller.

TC9/4GE200/K43F2 means two Twin City #9 trucks, four General Electric 200 motors, and one K-43-F2 controller.

TCWC/4GE70/2K28A means two Twin City Work Car trucks, four General Electric 70 motors, and two K-28-A controllers.

Since Brill 01 and 04 trucks were identical I have used the actual Brill model designation for all Brill trucks.

Unfortunately DSR records mostly did not distinguish between Baldwin #1 and Baldwin #5 trucks, or between Baldwin #5 and Twin City #5 trucks, or between Twin City #6 and Twin City #8 trucks. And too often Twin City trucks were referred to as Baldwin trucks.

Baldwin #1 trucks had outside hung brakes and were used only on cars 178-182. (See photo of TCRT 1051 on page 304.)

Baldwin #5 and Twin City #5 trucks were identical (page 292), one purchased and the other shop-built. (The wide split pull rod is shown in photos on pages 293 and 298.) The trucks in the photo on page 397 apparently are Baldwin #5 because of the manufacturer's plate on the equalizer bar even though they do not have the wide split pull rod.

Twin City #6 and Twin City #8 were apparently nearly identical as TCRT had one assembly drawing for both types. (#6 1½" frame / #8 1¼" frame) The only exterior means of identification was the nose on the equalizer bars, short on the #6 truck (as on the Baldwin #5 in the photo on page 397), and long on the #8 (same as on Twin City #9 or #9RB, photo page 293).

In the two reports, the abbreviated dates refer to the dates of the DSR Mechanical Dept. inventories as noted foregoing. Many changes probably took place between these dates. At each date reference I have noted only the equipment that actually changed between dates.

It appears that controllers were rarely changed. Upgrading by the purchase of new or used controllers seems to be the major effort, with the replaced passenger car controllers mostly transferred to service cars. Trucks and motors were apparently changed as a unit, for example Baldwin #5 trucks with G.E. 70 motors replacing Brill 27-A2 trucks with G.E. 70 motors, with the existing controllers remaining on the cars.

The disposition date in ERofM page 414 of 1935 for car 198 is incorrect. The car does appear on the November,1936 Motor List. This error also appears in DSR records. The correct disposition date is 1939.

DULUTH ST. RY.
TRUCKS, MOTORS AND CONTROLLERS
CHANGES IN CHRONOLOGICAL SEQUENCE

1911

1/64 4GE67 from retired Incline Car 63.

11-1917

2GE67 from 285 were added to 286. 285 got 2GE67 from DSR Spare Equipment.

12-1917

222 Trucks and Motors exchanged with Snow Plow 2/66:
  222 Brill27A2/4GE67;
  2/66 TC6/4GE216.
241 Trucks and Motors exchanged with Snow Plow 1/139:
  241 Brill27A2/4GE70;
  1/139 TC6/4GE216
248 Trucks and Motors exchanged with Snow Plow 3/140:
  248 Brill27A2/4GE70;
  1/140 TC8/4GE216.

10-1918/7-1919

289-294 received with BLW5/4GE70/K28B. "Exchanged" 7-1919 with new TC9/4GE200/K43F2 shipped by TCRT 5-1919.

10-1920

Exchange of trucks and motors on leased cars from TCRT being returned:
  164 Brill27A2/4GE70 from 248,
  197 TC9/4GE216 from 279(1672),
  248 TC9/4GE216 from 284(1673),
  279(1672) BLW5/4GE70 from 197,
  284(1673) BLW5/4GE70 from 164 (when did 164 receive BLW5/4GE70?).

1-1921

Received 8 extra GE70 motors (from returned 1672-1673?).

11-1923/1-1924

Controller changes:
  2 cars 152,154 K28B (were K6 and K28A);
  1 car 175 K28B (was K28A);
  10 cars 184-188,190-194 K35JJ (were K28B);
  2 cars 195-196 K43F2 (were K28B);

1 car 197 K37C (was K28B);
1 car 228 K37A (was K37C).
3 Snow Plows 1/139,2/66,3/140 2K35HH each.

Truck and Motor changes:
197 BLW5/4GE70 from 266;
248 TC6/4GE216 from 265;
265 TC9/4GE216 from 248;
266 TC9/4GE216 from 197.

222 Brill27A2/4GE70 (was Brill27A2/4GE67 from Snow Plow 2/66);
233,235 TC9/4GE200 from ? (were TC6/4GE216);
241 TC6/4GE216 from ? (was Brill27A2/4GE70 from Snow Plow 1/139);
255-256 Brill27A2/4GE67 from ? (Twin City trucks scrapped?).

Spare Equipment consisted of one set each of Brill27A2/GE67, BLW5/GE70, TC6/GE216 and TC9/GE200.

5-1928

Controller changes:
151-162 K35JJ (were K6 and K28B). Apparently done 4-24 when the cars were converted to P.A.Y.E. operation.
163-168,170-180 K35JJ (were K28A and K28B). Apparently done at the time each car was rebuilt One-Man, 1924-1928.

Truck and Motor changes:
179 Brill27A2/4GE70 from 222;
222 BLW1/4GE70 from 179.

12-1929

Two motors from each of 156-157,160,162, were placed on 285,287,288.
151,155-157,159-162 got K-28 with 2 each of their K35JJ to 285-288.

2-1930

170-176,179 BLW5/4GE70 from 183-185,190-194;
183-185,190-194 Brill27A2/4GE70 from 170-176,179.

10-1932

163-168,170-180,263 (18) TC9/4GE200 from 233,257-262,267,269-278 (18).
233,257-259,262,275,277 (7) Brill27A2/4GE70 from 163-168,177 (7).
260-261,267,269-274,276,278 (11) BLW1/4GE70 from 178,180 and BLW5/4GE70 from 170-176,179 (10). (Off 1 car.)
TC5/4GE213 from 263 to spare equipment? (What happened to one set of Brill27A2/4GE67 (11-30) and one set of Brill27A2/4GE70 (10-32) spare equipment?)

After 2-1935

240,244 BLW5orTC5/4GE213.
268 TC6/4GE216.

5-1937

255-256 TC9/4GE200/2K35JJ.

After 11-1936

198-200,212,244-245 TC9/4GE200.

DULUTH ST. RY.
TRUCKS, MOTORS AND CONTROLLERS

PASSENGER CARS

151-162 8/9-00 Brill27A2/4GE67/K6.
Data Sheet: some cars K28A.
1-24: 152,154 K28B.
4-24: all K35JJ (at time of conversion to P.A.Y.E. operation).
12-29: two motors from each of 156-157,160,162 were placed on 285,287,288.
151,155-157,159-162 got K28 with 2 each of their K35JJ to 285-288.

163-177 4/6-04 Brill27A2/4GE70/K28A.
10-20: 164 Brill27A2/4GE70 from 248; BLW5/4GE70 to 284(1673); no reference to when 164 got BLW5/4GE70.
1-24: 175 K28B.
Rebuilt One-Man 1924: 163,165,166. 1925: 164,167. 1925-26: 168,169.
1926: 177 1928: 170-176.
All received K35JJ at date of rebuilding.
169 wrecked 1-27.
5-28: 163-168,170-177 K35JJ.
2-30: 170-176 BLW5/4GE70, see Note 1.
10-32: 163-168,170-177 TC9/4GE200, see Note 2.

178 (1043) 2-05 BLW1/4GE70/K28B. Sold to DSR 2-05.
Rebuilt One-Man 1928: K35JJ.
5-28: K35JJ.
10-32: TC9/4GE200, see Note 2.

179-182 (1108-1111) 6-05 BLW1/4GE70/K28B. Sold to DSR 8-05(179) and 6-06 (180-182).
Rebuilt One-Man 1928: 179-180; K35JJ.
5-28: 179 Brill27A2/4GE70 from 222; 179,180 K35JJ.
2-30: 179 BLW5/4GE70, see Note 1.
10-32: 179-180 TC9/4GE200, see Note 2.

183-197 9/11-06 BLW5/4GE70/K28B.
10-20: 197 TC9/4GE216 from 279(1672); BLW5/4GE70 to 279(1672).
1-24: 197 BLW5/4GE70 from 266. 184-188,190-194 K35JJ, 195-196 K43F2, and 197 K37C.
2-30: 183-185,190-194 Brill27A2/4GE70, see Note 1.
10-32: 189 K35JJ.

198-203 3/5-08 BLW5/4GE213/K37A.
Rebuilt One-Man 1930.
After 11-36: 198-200 TC9/4GE200.

204-214 6-09 TC5/4GE213/K37A.
Rebuilt One-Man 1928: 210-213 1929: 208 1930: 204-207,209,214.
After 11-36: 212 TC9/4GE200.

215-219 5/6-10 TC6/4GE213/K37A.
Rebuilt One-Man 1928.

222-237 5/6-11 TC6/4GE216/K37C.
12-17: 222 Brill27A2/4GE67 from Snow Plow 2/66; TC6/4GE216 to 2/66.
1-24: 222 Brill27A2/4GE70; 233,235 TC9/4GE200. 228 K37A.
5-28: 222 BLW1/4GE70 from 179.
Rebuilt One-Man 1929: 223-226,228-232,234,237. 1930: 227,236.
10-32: 233 Brill27A2/4GE70, see Note 2.

238-241 (1482-1485) 2-11 TC6/4GE216/K37A Sold to DSR 6-11.
12-17: 241 Brill27A1/4GE70 from Snow Plow 1/139; TC6/4GE216 to 1/139.
1-24: 241 TC6/4GE216.
Rebuilt One-Man 1929: 238-239,241. 1930: 240.
After 2-35: 240 BLW5orTC5/4GE213.

242-251 5/8-12 TC8/4GE216/K37C.
12-17: 248 Brill27A2/4GE70 from Snow Plow 3/140; TC8/4GE216 to 3/140.
10-20: 248 TC9/4GE216 from 284(1673); Brill27A2/4GE70 to 164.
1-24: 248 TC6/4GE216 from 265.
Rebuilt One-Man 1928: 244. 1929: 242-243,245-251.
After 2-35: 244 BLW5orTC5/4GE213.
After 11-36: 244-245 TC9/4GE200.

252-254 (1564-1566) 8-12 TC8/4GE216/K37C. Sold to DSR 11-12.
Rebuilt One-Man 1929.

255-256 (868-869) 2/5-01 Rebuilt Dbl. End by TCRT and sold to DSR 12-12.
Twin City/4GE67/2K-6 (also as of 9-18).
10-22: equipped with combined pilot and shear for snow, each end.
1-24: Brill27A2/4GE67/2K-6.
5-30: Simplex safety device installed on each controller.
5-37: TC9/4GE200/2K35JJ.

257-262 9-14 TC9/4GE200/K43F2.
10-32: 257-259,262 Brill27A2/4GE70; 260-261 BLW1or5/4GE70, see Note 2.

263-266 (1789-1792) 12-15 TC9/4GE200/K43F2. Sold to DSR 5-16.
Data Sheet, "these cars use extra trucks and motors":
263 TC5/4GE213. 264-265 TC6/4GE216. 266 BLW5/4GE70.
264 wrecked 9-17.
1-24: 265-266 TC9/4GE216 from 197 and 248.
Rebuilt One-Man 1929: 265. 1930: 266.
2-30: 265-266 TC6/4GE216. (clerical error? TC9/4GE216?)
10-32: 263 TC9/4GE200, see Note 2.

267-270 (1724,1719,1716,1722) 11/12-14 TC9/4GE200/K43F2. Sold to DSR 7-16.
Rebuilt Front Exit 1923: 268-270.
Rebuilt One-Man 1930: 268.
10-32: 267,269,270 BLW5/4GE70, see Note 2.
After 2-35: 268 TC6/4GE216. (Photo as DM&IR W56: 1 TC6 and 1 TC9.)

271-278 5/6-17 TC9/4GE200/K43F2.
Rebuilt Front Exit 1923: 271-274,276-278.
10-32: 275,277 Brill27A2/4GE70; 271-274,276,278 BLW5/4GE70; see Note 2.

279-284 were TCRT 1672,988-991,1673 leased from 12-17 to 10-20.
280-283 Brill04/4GE70/K-28.

279,284 TC9/4GE216/K37C.
10-20: 279,284 BLW5/4GE70 from 197 and 164, before return to TCRT.

285-288 ex Park Point Traction Co. 10-11,20-21 acquired 9-17.
285-286 St.Louis47/2GE67/2K10. 287-288 Brill27G1/2GE67/2K10.
11-17: 2GE67 from 285 to 286: 286 4GE67/2K28B.
(285 2GE67 replaced from DSR equipment.)
7-18: remodeled seats and bumpers.
4-20: all converted to one-man operation.
1-28: Simplex safety device installed on each controller.
12-29: 285,287-288 received GE67 removed from 156,157,160,162 as well as 2K35JJ (8 total) from 151,155-157,159-162 so that 285-288 each were 4GE67/2K35JJ. Standard fenders and tail-lights, eight cross seats, and four destination rollsign boxes installed.

289-294 (1202,1204,1212 11/12-06; 1231,1232,1234 3-07). Sold to DSR 10-18.
TCRT Record Cards: BLW5/4GE70/K28B.
5-19: received TC9/4GE200/K43F2 from TCRT. Installed ("exchanged") 7-19 on 289-294.

Note 1

2-30: exchange involving 8 cars.
170-176,179: BLW5/4GE70 from 183-185,190-194;
183-185,190-194: Brill27A2/4GE70 from 170-176,179.

Note 2

10-32: exchange involving 18 cars.
163-168,170-180,263: TC9/4GE200 from 233,257-262,267,269-278.
233,257-259,262,275,277: Brill27A2/4GE70 from 163-168,177.
260-261,267,269-274,276,278: BLW1/4GE70 from 178,180 and BLW5/4GE70 from 170-176,179.
TC5/4GE213 from 263 to spare equipment?
(What happened to spare equipment: Brill27A2/4GE67, Brill27A2/4GE70?)

SPARE TRUCKS AND MOTORS

5-11: 1 set BLW5/GE70 for 178-197, 1 set BLW5/GE213 or TC5/GE213 for 198-214, 1 truck TC6/GE216 for 215-219, and 1 set TC6/GE216 for 222-241.

1-21: received 8 extra GE70 motors (from returned TCRT 1672-1673?).

1-24: 1 set each of Brill27A2/GE67, BLW5/GE70, TC6/GE216 and TC9/GE200.

5-28: 1 set each of Brill27A2/GE70, BLW5/GE70, TC6/GE216 and TC9/GE200.
1 set of Brill27A2 with 1 GE 67 motor.

2-30: 1 set each of Brill27A2/GE70, BLW5/GE70, TC6/GE216 and TC9/GE200.
1 set of Brill27A2 with 3 GE67 motors. Same at 11-30 except that the Brill27A2/GE67 set was complete.

10-32: 1 set each of BLW5/GE70, TC6/GE213 (see Note 2: TC5/GE213?), TC6/GE216
and TC9/GE200.

2-35: None listed.

MISCELLANEOUS NOTE

301-305

8-27: rear doors changed (no details listed).

DULUTH-SUPERIOR TRACTION CO.

WORK EQUIPMENT NUMBERING

Year	Description	DSR # Series	SRTR # Series
1900	Acquired the two SRTR T-H Dbl. End. Snow Sweepers		137-138
1896/ 1898	Snow Plow #1 (DSR 9-18 roster built 1902)		139
1901	Incline Railway 163 re-numbered	63	
1901	Flat Car #1	64	
1902	Flat Car #2	65	
1903	Snow Plow #2	66	
1904	Tower Car #1 rebuilt from Open Motor 95	67	
1906	Snow Plow #3		140
1907	Flat Car #3	96	
1911	Wrecker #1		141
1912	Flat Car #4	97	
1917	Flat Cars #5-#8		142-145
1917	Snow Plow #4		146
1917	My guess: Tower Car #2 assigned to passenger car 51 converted in 1892 (scrapped 1923)		
1917	Acquired Park Point Traction Co.:		
	#12 Snow Plow #5		147
	#13 Tower Car #3		148

DOUBLE TRUCK SERVICE CARS

1/139 Snow Plow

1898: Brill27A1/4WH49/2K12.
1902: Brill27A2/4GE67/2K28A. (Brill27A2 in 2-04 SRJ photograph.)
19??: Brill27A2/4GE70.
12-17: TC6/4GE216 from 241.
11-22: 2K35HH. Pneumatic lifts for nose wings added.
4-39: Dismantled.

2/66 Snow Plow

1903: Brill27A2/4GE67/2K6.
12-17: TC6/4GE216 from 222.
11-22: 2K35HH. Pneumatic lifts for nose wings added.
4-39: Dismantled.

3/140 Snow Plow

1906: Brill27A2/4GE67/2K28B.
19??: Brill27A2/4GE70.
12-17: TC8/4GE216 from 248.
11-22: 2K35HH. Pneumatic lifts for nose wings added.
4-39: Dismantled.

4/146 Snow Plow

11-17: BLW4/4GE73E/C6K.
10-32: BLW3. (TCRT 12-07 shipped 1 set BLW3/4GE87 to DSR.)
10-40: Dismantled.

1/64 Work Flat

1901: Brill27A2/?/?. Offset exposed control stands each end; frame structure over one for support of trolley base.
19??: DSR/?/2K6. Offset enclosed cab on one end; trolley base attached.
1911: TCWC/4GE67 from 63. Offset enclosed cabs each end.
5-14: Center enclosed cab on pedestal each end.
10-21: Raised platform built to haul rock, gravel, etc.
4-30: Repainted Yellow.
5-30: Added detachable snow scraper shear on each end and detachable side wing on each side.
1-37: Sold complete to Inter-State Iron Co.(Calumet, Minn.)

2/65 Work Flat

1902: DSR/?/?.
DSR trucks in photograph dated 7-12; also offset enclosed cabs each end.
5-14: TCWC/4GE70/2K6. Center enclosed cab on pedestal each end.
4-30: Repainted Yellow.
5-30: Added detachable snow scraper shear on each end and detachable side wing on each side.
4-38: Dismantled.

3/96 Work Flat

1907: TCWC/4GE67/2K6. Offset enclosed cab one end; exposed control stand other end. Two hoists. Later, offset enclosed cabs each end.
5-14: Original motorman's cab replaced with center cab (on pedestal).
11-16: Second motorman's cab added (on pedestal). Two hoists.
4-17: Two 1-ton electric hoists on I-beam derricks added.

AVERY® PV119ED

1-24: 4GE70/2K28A.
4-30: Repainted Yellow.
5-30: Added detachable snow scraper shear on each end and detachable side wing on each side.
10-40: Dismantled.

4/97 Work Flat

1912: TCWC/4GE70/2K6. Center enclosed cab on pedestal each end.
1-24: 2K28B.
4-30: Repainted Yellow.
5-30: Added detachable snow scraper shear on each end and detachable side wing on each side.
4-39: Dismantled.

1/67 Tower Car

1904: Bemis/4GE67/2K12. (Trucks and Motors from 95.)
19??: DSR.
6-14: Second-hand GE67 motors added.
4-30: Repainted Yellow.
10-32: 2K6.
4-33: Dismantled.

1/141 Wrecker

1911: TCWC/4GE70/K28B. 8-ton Crane.
5-28: K35JJ.
4-30: Repainted Yellow.
10-40: Dismantled.

SINGLE TRUCK DOUBLE END CARS 52 and 57

1919: McGuire/2SRG30/2K2.
5-28: 2GE67/2K28.

SINGLE TRUCK SERVICE CARS

1/88 Supply Car

19??: McGuire/2SRG30/2K2. (2SRG30 from 31 between 3-00 and 5-10.)
10-32: 2GE67/2K10.
6-35: Dismantled.

131 Supply Car (later used as the Superior Div. Wrecker)

9-20: McGuire/2WP30/2K2.
6-31: Dismantled.

62 Supply Car

11-23: Dismantled. (Sold for scrap to West End Iron & Metal Co.?)

5/142 Work Flat

4-17: McGuire/2SRG30/K2 from 85.
4-30: Repainted Yellow.
2-35: K10.
6-35: Dismantled.

6/143 Work Flat

7-17: McGuire/2SRG30/K2 from 61.
4-30: Repainted Yellow.
4-38: Dismantled.

7/144 Work Flat

7-17: McGuire/2SRG30/K2 from 49.
4-30: Repainted Yellow.
10-32: 2GE67/K10.
4-39: Dismantled.

8/145 Work Flat

7-17: McGuire/2SRG30/K2 from 42. (42 got McGuire/2SRG30/K2 from 50.)
4-30: Repainted Yellow.
4-39: Dismantled.

5/147 Snow Plow (PPTC 12)

9-17: McGuire/2WP30/?
10-22: Two second-hand GE67 motors from 286 and second-hand McGuire truck frame from 82.
11-22: Two K10 from 286 added and winches from 1/139 installed for raising two head-wings.
5-28: 2GE67/2K10.
6-31: Dismantled.

3/148 Tower Car (PPTC 13)

9-17: McGuire/2WP30/2K2. (Tower Car 51 was scrapped 8-23. As of 1-24 listed as 2/148.)
4-30: Dismantled.

Park Point Fire Car

6-31: Dismantled.

Other:

Retired 1933: Ash Car Trilers with trucks from 47 and 51.
Scrapped 1940: Ice Braker GOLIATH

Car Assignments

We have selected the February, 1918, car assignment listing as an interesting example of the distribution of DSR's equipment between Duluth and Superior.

Duluth Division

104 passenger cars: 151-162, 185-215, 222-254, 255-256 (Highland Ave. line), 257-262 and 265-284.

2 incline cars: 220-221.

1 private car: 42 "St. Louis" (out of service).

13 work cars: Supply car 1/88; Wrecking car 1/141; Tower car 1/67; Flat Cars 1/64, 2/65, 3/96, 4/97, 5/142, 7/144, 8/145/ and Snow Plows 1/139, 3/140, and 4/146.

Park Point Division

4 passenger cars: 285-288.

2 work cars: Tower car 3/148 and Snow Plow 5/147.

Superior Division

10 passenger cars (single truck): 47, 52, 53, 57, 59, 73, 75, 79, 82 and 131.

27 passenger cars (double truck): 163-184, 216-219 and 263.

4 work cars: Flat car 6/143, Snow Plow 2/66, Tower car 51 and Supply car 62.

Mechanical Dep't.

January 1924

THE DULUTH STREET RAILWAY CO
CAR EQUIPMENT
FOR THE
DULUTH DIVISION

CARS MARKED "I" ARE USED ON INTERSTATE
INTERSTATE CARS HAVE NO FARE BOX
CARS MARKED "PE" ARE P.A.Y.E.
CARS MARKED "F.X." ARE FRONT EXIT

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE
1/88	SUPPLY CAR	McGUIRE	2-SRG30	^{2}K2		1895
5/142	FLAT "	"	"	^{1}K2		4-1917
7/144	" "	"	"	1 "		7- "
8/145	" "	"	"	1 "		" "
5/147	SNOW PLOW	"	2GE67	^{2}K10		9-1-17
2/148	WIRE CAR	"	"	^{2}K2		"
	Ash Car Trailer	"	TRUCKS TAKEN from #47			8-1923
	" " "	"	" " " 51			" "

6 SINGLE TRUCK WORK CARS
2 " " TRAILERS

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
1/64	FLAT CAR	D.S.R.Co.	4-G.E.67	^{2}K-6	A-1	1901
2/65	" "	"	" " 70	" "	"	1902
1/139	SNOW PLOW	BALD.	" " 216	^{2}K35HH	"	"
1/67	TOWER CAR	BEMIS	" " 67	^{2}K12	"	1904
3/140	SNOW PLOW	BALD.	" " 216	^{2}K35HH	A4	1906
3/96	FLAT CAR	D.S.R.Co.	" " 70	^{2}K28A	A1	1907
1/141	WRECKER	"	" " "	^{1}K28B	CP21	1911
4/97	FLAT CAR	"	" " "	^{2} "	A1	1912
4/146	SNOW PLOW	BALD.	" " 73E	^{1}C6K	CP21	11-1917

9 DOUBLE TRUCK WORK CARS

SINGLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
	52$_{PE}$	McGUIRE	2SRG30	2K2		1892
	57$_{PE}$	"	"	" "		"
295$_{PE}$		BRILL 78 M1	2GE258C	^{1}K63B	CP25C2	10-1-19
296$_{PE}$		"	"	"	"	"
297$_{PE}$		"	"	"	"	"
298$_{PE}$		"	"	2 "	"	"
299$_{PE}$		"	"	"	"	"
300$_{PE}$		"	"	"	"	"

2 SLOW SINGLE TRUCK PASS. CARS
6 FAST " " " "
8 SINGLE TRUCK PASS. CARS

DOUBLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
	151	BRILL 27	4GE67	1K6	AA1	6-1901
	152	"	"	1-K28B	"	" "
	153	"	"	1-K6	"	" "
	154	"	"	1-K28B	"	" "
	155	"	"	1-K6	"	" "
	156	"	"	"	"	" "
	157	"	"	"	"	" "
	158	"	"	"	"	" "
	159	"	"	"	"	" "

DOUBLE TRUCK PASS. CARS (CONT'D.)

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
	160	BRILL^{27}	4GE67	1-K6	AA1	6-1901
	161	"	"	"	"	" "
	162	"	"	"	"	" "
	163	"	" 70	^{1}K28A	"	4-1904
	164	"	"	"	"	" "
	165	"	"		"	" "
	189	BALD.	"	Circuit Breaker " B	CP27	7-1907
	190	"	"	K35JJ	CP21	" "
	191	"	"	"	" 27	" "
	192	"	"	"	" 21	" "
	193	"	"	"	"	" "
	194	"	"	"	"	" "
	195	"	"	K43F2	"	" "
	196	"	"	"	"	" "
	197	"	"	K37C	"	" "
I 198$_{PE}$		"	4GE213	K37A	"	6 1908
I 199$_{PE}$		"	"	" "	"	" "
I 200$_{PE}$		"	"	" "	"	" "
I 201$_{PE}$		"	"	" "	"	" "
I 202$_{PE}$		"	"	" "	"	" "
203		"	"	" "	CP27	" "
204		"	"	" "	CP21	7 1909
205		"	"	" "	"	" "
206		"	"	" "	"	" "
207		"	"	"	"	" "
208		"	"	" 9	"	" "
I 209$_{PE}$		"	"	" "	"	" "
210		"	"	" "	"	" "
211		"	"	" "	"	" "
I 212$_{PE}$		"	"	" "	"	" "
220$_{PE}$ INCLINE CABLE CARS					"	6 1911
221$_{PR}$					"	" "
	222	BRILL	4GE70	^{1}K37C	CP27	" "
223		T.C.R.T.	" 216	" "	"	" "
224		"	" "	" "	"	" "
225		"	"	" "	"	" "
226		"	"	" "	"	" "
227		"	"	" "	"	" "
228		"	"	" A	"	" "
229$_{PE}$		"	"	" C	"	" "
230		"	"	" "	"	" "
231 PE		"	"	" "	"	" "
232		"	"	" "	"	7 "
233		" $^{\#}$9	4 " 200	" "	"	" "
234		"	" " 216	" "	"	" "
235		" $^{\#}$9	4 " 200	" "	"	" "
236		"	" " 216	" "	"	" "
237		"	"	" "	"	" "
238		"	"	" A	"	" "
239$_{PE}$		"	"	" "	AA6	" "
240$_{PE}$		"	"	" "	"	" "
241		"	"	" "	"	" "
242		"	"	" C	CP27	6-1912

DOUBLE TRUCK PASS. CARS (CONT'D)

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
243		T.C.R.T.	4GE216	^{1}K37C	CP27	6-1912
244		"	"	"	"	" "
245		"	"	"	"	8 "
246		"	"	"	"	" "
247		"	"	"	"	" "
248		"	"	"	"	" "
249		"	"	"	"	" "
250		"	"	"	"	" "
251		"	"	"	"	" "
252		"	"	"	"	10 "
253		"	"	"	"	" "
254		"	"	"	"	" "
	255$_{PE}$	BRILL	4 " 67	2K6	AA1	1 1913
	256$_{PE}$	"	" " "	" "	"	" "
257		T.C.R.T.$^{\#}$9	" " 200	K43F2	CP25	10 1914
258		"	"	"	CP21	" "
259		"	"	"	CP25	" "
260		"	"	"	"	" "
261		"	"	"	"	" "
262		"	"	"	"	" "
265		"	" " 216	"	"	5-1916
266		"	"	"	"	" "
267		"	" " 200	"	"	8 "
FX 268$_{PE}$		"	"	"	"	" "
FX 269$_{PE}$		"	"	"	"	" "
FX 270$_{PE}$		"	"	"	"	" "
FX 271$_{PE}$		"	"	"	"	6 1917
FX 272$_{PE}$		"	"	"	"	" "
FX 273$_{PE}$		"	"	"	"	5 "
FX 274$_{PE}$		"	"	"	"	" "
275		"	"	"	"	6 "
FX 276$_{PE}$		"	"	"	"	" "
FX 277$_{PE}$		"	"	"	"	" "
FX 278$_{PE}$		"	"	"	"	" "
	^{10}285$_{PE}$	ST LOUIS	2GE67	2K10	AA1	9-1-17
	^{11}286$_{PE}$	"	4 " "	" K28B	"	" " "
	^{20}287$_{PE}$	BRILL 27 G1	2 " "	" K10	A4	" " "
	^{21}288$_{PE}$	"	" " "	"	"	" " "
289		T.C.R.T.$^{\#}$9	4 " 200	K43F2	CP21	11 20 18
290		"	"	"	"	"
291		"	"	"	"	"
292		"	"	"	"	"
293		"	"	"	"	"
294		"	"	"	"	"

31 SLOW DOUBLE TRUCK PASS. CARS
73 FAST " " " "
104 DOUBLE TRUCK PASS. CARS
8 SINGLE " " "
2 INCLINE CABLE " "
114 PASSENGER CARS

1- SET #9 T.C.R.T.Co. TRUCKS EQUIPPED WITH 4 GE 200 M.
1 " " " " " " 216 "
1 " BALDWIN " " " " 70 "
1 " BRILL " " " " 67 "
1- " " "

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THE DULUTH STREET RAILWAY Co.
CAR EQUIPMENT
FOR THE
SUPERIOR DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE
131	SUPPLY CAR	McGUIRE	2SRG30	^{2}K2		
6/143	FLAT "	"	" "	^{1}K2		7-1917
	Ash Car Trailer	"	TRUCKS TAKEN from #79			8-1923

2 SINGLE TRUCK WORK CARS
1 " " TRAILER

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
2/66	SNOW PLOW	BALD.	4GE216	K35HH	A1	1903

1 DOUBLE TRUCK WORK CAR

DOUBLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE
	166$_{PE}$	BRILL	4GE70	^{1}K28A	AA1	4-1904
	167$_{PE}$	"	"	" "	"	" "
	168$_{PE}$	"	"	" "	"	" "
	169$_{PE}$	"	"	" "	"	" "
	170$_{PE}$	"	"	" "	"	" "
	171$_{PE}$	"	"	" "	"	" "
	172$_{PE}$	"	"	" "	"	" "
	173$_{PE}$	"	"	" "	"	" "
	174$_{PE}$	"	"	" "	"	" "
	175$_{PE}$	"	"	" B	"	" "
	176$_{PE}$	"	"	" A	"	" "
	177$_{PE}$	"	"	" "	"	" "
	178$_{PE}$	BALD	"	" B	AA2	3-1905
	179$_{PE}$	"	"	" "	"	" "
	180$_{PE}$	"	"	" "	"	7-1906
	181$_{PE}$	"	"	" "	"	" "
	182$_{PE}$	"	"	" "	A1	" "
	183$_{PE}$	"	"	" "	CP21	6-1907
	184$_{PE}$	"	"	K35JJ	"	" "
	I 185$_{PE}$	"	"	"	"	" "
	186$_{PE}$	"	"	"	"	" "
	I 187$_{PE}$	"	"	"	"	" "
	188$_{PE}$	"	"	"	"	" "
I 213$_{PE}$		"	4GE213	K37A	"	7-1909
I 214$_{PE}$		"	"	" "	"	" "
I 215$_{PE}$		"	"	K37	"	6 1910
I 216$_{PE}$		"	"	"	"	" "
I 217$_{PE}$		"	"	"	"	" "
I 218$_{PE}$		"	"	"	"	" "
I 219$_{PE}$		"	"	"	"	" "
I 263$_{PE}$		"	"	K43F2	CP25	5 1916

23 SLOW DOUBLE TRUCK PASS. CARS
8 FAST " " " "
31 DOUBLE TRUCK PASS. CARS

PRINT 1547

Mechanical Dept. May 22, 1928

THE DULUTH STREET RAILWAY CO.
CAR EQUIPMENT
FOR THE
DULUTH DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
1/88	SUPPLY CAR	McGUIRE	^{2}SR6	^{2}K2		1895	
5/192	FLAT "	"	"	^{1}K2		4-1917	
7/194	" "	"	"	"		7- "	
8/195	" "	"	"	"		" "	
5/197	SNOW PLOW	"	^{2}GE67	^{2}K10		9-1-17	PARK POINT
2/198	WIRE CAR	"	^{2}WP30	^{2}K2		" " "	" " NOT IN SERVICE
	ASH CAR TRAILER	"				8-1923	
	"					" "	

6 SINGLE TRUCK WORK CARS
2 " " TRAILERS

DOUBLE TRUCK WORK CARS

4/99
4/139

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
1/64	FLAT CAR	A.S.R.Co.	4 GE67	^{2}K6	A1	1901	
2/65	" "	"	" 70	"	"	1902	
3/86	" "	"	" "	^{2}K28	"	1907	
4/106	" "	"	" "	"	"	1912	
1/131	SNOW PLOW	BALD.	" 216	^{2}K35	"	1902	
3/180	" "	"	" "	"	A9	1906	
4/186	" "	"	" 73B	LC6K	CP21	11-1917	
1/67	WIRE CAR	BEMIS	" 67	^{2}K12	A1	1904	
1/151	WRECKER	A.S.R.Co.	" 70	K35JJ	CP21	1911	

3 DOUBLE TRUCK WORK CARS

SINGLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
	52	[illegible]	2 GE67	K28		1892	DOUBLE END - OLD TYPE
	57	"	"	"		"	"
[illegible]		BRILL 79 M1	2 #258C	K63B	CP25C2	10-1-19	S.E. BIRNEY
[illegible]		"	"	" "	"	"	" "
[illegible]		"	"	" "	"	"	D.E. "
[illegible]		"	"	" "	"	"	" "
300		"	"	" "	"	"	" "

ONE MAN CARS ON [illegible]

2 SLOW SINGLE TRUCK PASS. CARS
[illegible] FAST " " " "
[illegible] SINGLE TRUCK PASSENGER CARS

DOUBLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
	151	BRILL	4 GE67	K35JJ	AA1	6-1901	
	152	"	"	"	"	"	
	153	"	"	"	"	"	
	154	"	"	"	"	"	
	155	"	"	"	"	"	
	156	"	"	"	"	"	
	157	"	"	"	"	"	
	158	"	"	"	"	"	
	159	"	"	"	"	"	
	160	"	"	"	"	"	
	161	"	"	"	"	"	
	162	"	"	"	"	"	

DOUBLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
	170	BRILL	4GE70	K35JJ	AA1	4-1904	ONE MAN CAR 4-1-28
	171	"	"	"	"	" "	" " " " " "
	172	"	"	"	"	" "	" " " " " "
	173	"	"	"	"	" "	" " " " " "
	174	"	"	"	"	" "	" " " " 28 "
	175	"	"	"	"	" "	" " " " " "
	176	"	"	"	"	" "	" " " 5-24-"
	178	BALD.	"	"	AA2	3-1905	" " " " " "
	179	BRILL.	"	"	"	" "	" " " 6-1 "
	180	BALD.	"	"	"	7-1906	" " " " 3 "
	181	"	"	K28	A1	" "	
	183	"	"	"	AA1	6 1907	
	184	"	"	K35JJ	"	" "	
	185	"	"	"	"	" "	
	189	"	"	K28	"	7 "	
	190	"	"	K35JJ	CP21	" "	
	191	"	"	"	AA1	" "	
	192	"	"	"	CP21	" "	
	193	"	"	"	"	" "	
	194	"	"	"	"	" "	
	195	"	"	K43F2	"	" "	
	196	"	"	"	"	" "	
	197	"	"	K37C	"	" "	
198		"	4GE213	K37A	"	6-1908	INTERSTATE
199		"	"	"	"	" "	"
200		"	"	"	"	" "	"
201		"	"	"	"	" "	"
203		"	"	"	CP27	" "	"
204		"	"	"	CP21	7-1909	"
205		"	"	"	"	" "	
206		"	"	"	"	" "	INTERSTATE
207		"	"	"	"	" "	"
208		"	"	"	"	" "	"
210		"	"	"	"	" "	"
220 221	INCLINE CABLE CARS					6 1911 " "	2-GE210 MOTORS AT TOP OF INCLINE RY.
	222	BALD.	4GE70	K37C	CP27	" "	
223		T.C.R.T.Co.	4GE216	"	"	" "	
224		"	"	"	"	" "	
225		"	"	"	"	" "	
226		"	"	"	"	" "	
227		"	"	"	"	" "	
228		"	"	" A	"	" "	
229		"	"	" C	"	" "	
230		"	"	"	"	" "	
231		"	"	"	"	" "	
232		"	"	"	"	" "	
233		" #9	4GE200	"	"	" "	
234		"	" 216	"	"	" "	
235		" #9	" 200	"	"	" "	
236		"	" 216	"	"	" "	
237		"	" "	"	"	" "	
238		"	" "	" A	"	" "	
239		"	" "	" "	AA6	" "	
240		"	" "	" "	"	" "	
241		"	" "	" "	"	" "	
242		"	" "	" C	CP27	6-1912	
243		"	" "	" "	"	" "	
244		"	" "	" "	"	" "	
245		"	" "	" "	"	" "	

DOUBLE TRUCK PASS. CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
246		T.C.R.T.Co.	4GE216	K37C	CP27	8-1912	
247		"	"	"	"	" "	
248		"	"	"	"	" "	
249		"	"	"	"	" "	
250		"	"	"	"	" "	
251		"	"	"	"	" "	
252		"	"	"	"	10 "	
253		"	"	"	"	" "	
254		"	"	"	"	" "	
	255	BRILL	" 67	^{2}K6	AA1	1 1913	HIGHLAND D.E. ONE MAN CARS
	256	"	"	"	"	" "	
257		T.C.R.T. #9	" 200	K43F2	CP25	10-1914	
258		"	"	"	CP21	" "	
259		"	"	"	CP25	" "	
260		"	"	"	"	" "	
261		"	"	"	"	" "	
262		"	"	"	"	" "	
265		"	" 216	"	"	5-1916	
266		"	"	"	"	" "	
267		"	200	"	"	8 "	
268		"	"	"	"	" "	FRONT EXIT 12-9-23
269		"	"	"	"	" "	" " 11-29-"
270		"	"	"	"	" "	" " "-21 "
271		"	"	"	"	6-1917	" " "-11-"
272		"	"	"	"	" "	" " "-21-"
273		"	"	"	"	5 "	" " " 2-"
274		"	"	"	"	" "	" " " " "
275		"	"	"	"	" "	
276		"	"	"	"	" "	FRONT EXIT 11-11-23
277		"	"	"	"	" "	" " " 29-"
278		"	"	"	"	" "	" " 12-9-"
	285	ST. LOUIS	2 GE67	^{2}K10	AA1	9-1-17	ON PARK POINT
	286	"	4 "	^{2}K28	"	"	"
	287	BRILL 27G1	2 "	^{2}K10	A4	"	"
	288	"	" "	"	"	"	"
289		T.C.R.T. #9	4GE200	K43F2	CP21	11-20-18	
290		"	"	"	"	"	
291		"	"	"	"	"	
292		"	"	"	"	"	
293		"	"	"	"	"	
294		"	"	"	"	"	

DOUBLE END ONE MAN CARS

42 SLOW DOUBLE TRUCK PASS. CARS
69 FAST " " " "
111 DOUBLE TRUCK PASSENGER "
7 SINGLE " " "
2 INCLINE CABLE " "
120 TOTAL PASSENGER CARS IN DULUTH

EXTRA EQUIPMENT

1-SET #9 T.C.R.T.Co. TRUCKS EQUIPPED WITH 4 GE 200 MOTORS
1- " #6 " " " " " 216 "
1- " BALDWIN " " " " 70 "
1 " BRILL " " " 1 67 "
1 " " " " " 4 70 "

2-GE 258 C ARMATURES

No. 1758

Mechanical Dept. May 22, 1928

THE DULUTH STREET RAILWAY CO.
CAR EQUIPMENT
FOR THE
SUPERIOR DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
131	SUPPLY CAR	McGUIRE	2-SR630	^{2}K2			
6/143	FLAT	"	"	^{1}K2		7-1917	
	ASH CAR TRAILER					8-1923	TRUCKS TAKEN FROM No.79

2 SINGLE TRUCK WORK CARS
1 " " " " TRAILER

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
2/66	SNOW PLOW	BALD.	4-GE216	2-K35 HH	A1	1903	

1- DOUBLE TRUCK WORK CAR

PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
	163	BRILL	4-GE70	K-35JJ	CP27	4-1904	ONE MAN CAR 9-26-24
	164	"	"	"	CP21	" "	" " " 8-24-25
	165	"	"	"	"	" "	" " " 9-26-24
	166	"	"	"	"	" "	" " " " " "
	167	"	"	"	"	" "	" " " 8-24-25
	168	"	"	"	"	" "	" " " 1-29-26
	177	"	"	"	"	" "	" " " 6-26-"
	182	BALD	"	K28B	A1	7-1906	
	186	"	"	K35JJ	CP21	" "	
	187	"	"	"	"	" "	INTERSTATE
	188	"	"	"	"	" "	
202		"	4GE213	K37A	"	6-1908	INTERSTATE
209		"	"	"	"	7-1909	"
211		"	"	"	"	"	"
212		"	"	"	"	"	"
213		"	"	"	"	"	"
214		"	"	"	"	"	"
215		"	"	"	"	6-1910	"
216		"	"	"	"	" "	"
217		"	"	"	"	" "	"
218		"	"	"	"	" "	"
219		"	"	"	"	" "	"
263		"	"	K43F2	CP25	5-1916	"
297		BRILL 79 M1	^{2}GE258C	^{1}K63B	CP25C2	10-1-19	S.E. BIRNEY
301		SMITH 12	^{4}GE258K	^{1}K28	CP25C6	4-19-25	ONE-MAN CAR
302		"	"	"	"	" " "	" " "
303		"	"	"	"	" " "	" " "
304		"	"	"	"	" " "	" " "
305		"	"	"	"	" " "	" " "

LIGHT WEIGHT NOISELESS TYPE SINGLE END

11 SLOW DOUBLE TRUCK PASS. CARS
17 FAST " " " "
28 DOUBLE TRUCK PASS. CARS
1 SINGLE " " "
29 TOTAL PASSENGER CARS IN SUPERIOR

EXTRA EQUIPMENT

1-SMITH #12 TRUCK & 2 GE 258 K MOTORS
2 " ARMATURES

No. 1759

DULUTH-SUPERIOR TRANSIT CO.
CAR EQUIPMENT
FOR THE
DULUTH DIVISION

Mech. Dept. 2-7-35

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
1/88	SUPPLY CAR	McGUIRE	GE 67	K 10		1895	DOUBLE END
5/192	FLAT	"	SRG 30	K 10		4-1917	SINGLE "
7/144	COAL CAR	"	GE 67	K 10		7 "	" "
8/195	ASH CAR	"	SRG 30	K 2		" "	" "
	ASH CAR	"				8-1923	TRAILER

4 SINGLE TRUCK WORK CARS
1 " " " " TRAILER

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
1/64	FLAT	DSR	GE 67	K 6	A 1	1901	DOUBLE END
2/65	"	"	70	"	"	1902	" "
3/96	"	"	"	28	"	1907	" "
4/97	"	"	"	"	"	1912	" "
1/139	SNOW PLOW	BLWN #6	216	K35 HH	"	1902	" "
3/190	" "	"	"	"	A 4	1906	" "
4/146	" "	" 03	73E	C6K	CP21	11-1917	SINGLE "
1/141	WRECKER	DSR	70	K35 JJ	"	1911	" "

8 DOUBLE TRUCK WORK CARS

SINGLE TRUCK PASS. CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
295		BRILL 78 M1	258C	K 63 B	CP25 CL	10-1-19	SINGLE END
296		"	"	"	"	"	"
297		"	"	"	"	"	"
298		"	"	"	"	"	DOUBLE END
299		"	"	"	"	"	"
300		"	"	"	"	"	"

6 BIRNEY TYPE CARS

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
	163		T.C. #9	GE 200	K35JJ	CP27	4-1904	DOUBLE END
	171		"	"	"	CP21	"	SIMPLEX SAFETY
	172		"	"	"	"	"	"
	174		"	"	"	"	"	"
	179		"	"	"	"	3-1905	"
	180		"	"	"	"	7-1906	"
○		191	BRILL	70	"	AA1	7-1907	
○		193	"	"	"	"	8- "	
○		194	"	"	"	"	"	
○		195	BLWN.	"	K43F2	"	"	
○		196	"	"	"	"	"	
○		197	"	"	K 37	"	"	
	198		"	213	"	CP21	6-1908	G.E. SAFETY
	199		"	"	"	"	"	"
	200		"	"	"	"	"	"
	201		"	"	"	"	"	"
	202		"	"	"	"	"	"

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
	203		BLWN.	GE 213	K 37	CP21	8-1908	G.E. SAFETY
	204		"	"	"	"	7-1909	"
	205		"	"	"	"	"	"
	206		"	"	"	"	"	"
	207		"	"	"	"	"	"
	208		"	"	"	"	"	"
	209		"	"	"	"	"	"
	210		"	"	"	"	"	SIMPLEX SAFETY
	211		"	"	"	"	"	"
	212		"	"	"	CP27	"	"
	213		"	"	"	CP21	"	"
	214		"	"	"	"	"	G.E. SAFETY
	215		"	"	"	"	6-1910	SIMPLEX SAFETY
	216		"	"	"	"	"	"
	217		"	"	"	"	"	"
	218		"	"	"	"	"	"
	219		"	"	"	"	"	"
		220	INCLINE CAR			"	6-1911	
		221	"	"		"	"	
○		222	BLWN.	GE 70	K37C	A 1	"	
	223		" #6	216	"	CP27	"	G.E. SAFETY
	224		"	"	"	"	"	"
	225		"	"	"	"	"	"
	226		"	"	"	"	"	"
	227		"	"	"	"	"	"
	228		"	"	" A	"	"	"
	229		"	"	" C	"	"	"
	230		"	"	"	"	"	"
	231		"	"	"	"	"	"
	232		"	"	"	"	"	"
	234		"	"	"	"	"	"
○	235		T.C. #9	200	"	"	"	
	236		BLWN 6	216	"	"	"	G.E. SAFETY
	237		"	"	"	"	"	"
	238		"	"	" A	"	"	"
	239		"	"	"	"	"	"
	240		"	"	"	CP21	"	"
	241		"	"	"	A 1	"	"
	242		"	"	" C	CP 27	6-1912	"
	243		"	"	"	"	"	"
	244		"	"	"	"	"	SIMPLEX SAFETY
	245		"	"	"	"	"	G.E. "
	246		"	"	"	"	8 "	"
	247		"	"	"	"	"	"
	248		"	"	"	"	"	"
	249		"	"	"	"	"	"
	250		"	"	"	"	"	"
	251		"	"	"	"	"	"
	252		"	"	"	"	10 "	"
	253		"	"	"	"	"	"
	254		"	"	"	"	"	"
		255	BRILL	67	K 6	AA1	1-1913	HIGHLAND
		256	"	"	"	"	"	" DOUBLE END SIMPLEX SAFETY
○		257	"	70	K43F2	CP25	10-1914	
○		258	"	"	"	"	"	
○		262	"	"	"	"	"	
○	263		T.C. #9	200	"	"	5-1916	
	265		BLWN 6	216	"	"	"	G.E. SAFETY
	266		"	"	"	"	"	"
	268		T.C. #9	200	"	"	8 "	"

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
○		275	BRILL	GE 70	K43F2	CP25	5-1917	
○	289		T.C. #9	200	"	CP21	11-20-18	
○	290		"	"	"	"	"	
○	291		"	"	"	"	"	
○	292		"	"	"	"	"	
○	293		"	"	"	"	"	
○	294		"	"	"	"	"	

3 SINGLE END BIRNEY TYPE ONE MAN CARS
3 DOUBLE " " " " " "
2 INCLINE " " " "
2 DOUBLE END ON HIGHLAND " " "
1 " " " CROSLEY AVE. " " "
60 SINGLE " REMODELED TO " " "
71 TOTAL ONE MAN PASS. CARS IN DULUTH
○ = 19 " TWO " " " " "
90 PASS. CARS IN DULUTH

15 TWO MAN CARS ORDERED SOLD FOR SCRAP 1934

CAR No.	TRUCKS	MOTORS	CONT.	AIR	REMARKS
181	BLWN	GE 70	K28		D
182	"	"	"		D
183	BRILL	"	"		S
184	"	"	K35JJ		S
185	"	"	"		S
186	BLWN	"	"		S
269	"	"	K43F2		D FRONT EXIT
270	BODY, HEATING PLANT,				SIDE SEATS SOLD 10-8-34
271	"	"	"		D FRONT EXIT
272	"	"	"		D "
273	"	"	"		D "
274	"	"	"		D "
276	"	"	"		D "
277	BRILL	"	"		D "
278	BLWN	"	"		D "

Year 1934

Mech. Dept. [illegible]

DULUTH-SUPERIOR TRANSIT CO
CAR EQUIPMENT
FOR THE
SUPERIOR DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
6/143	ASH CAR	McGUIRE	SRG 30	K 2		7-1917	SINGLE END

1 SINGLE TRUCK WORK CAR

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
2/66	SNOW PLOW	BLWN.	GE 216	K35HH	A1	1903	DOUBLE END

1 DOUBLE TRUCK WORK CAR

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
	164		T.C. #9	GE 200	K35JJ	CP21	4-1904	FRONT EXIT ONLY
	165		"	"	"	"	"	"
	166		"	"	"	"	"	"
	167		"	"	"	"	"	"
	168		"	"	"	"	"	"
	177		"	"	"	"	"	"
	170		"	"	"	"	"	SIMPLEX SAFETY
	173		"	"	"	"	"	
	175		"	"	"	"	"	
	176		"	"	"	"	"	
	178		"	"	"	"	3-1905	
	301		SMITH	GE 258K	K28	CP25CE	4-13-29	SIMPLEX SAFETY
	302		" #12	"	"	"	"	"
	303		"	"	"	"	"	"
	304		"	"	"	"	"	"
	305		"	"	"	"	"	"
○		187	BLWN	70	K35JJ	CP21	6-1907	
○		188	"	"	"	AA1	"	
○		189	"	"	"	"	7- "	
○		190	BRILL	"	"	"	"	
○		192	"	"	"	"	"	
○		233	"	"	K37		6-1911	
○		259	"	"	K43F2	CP25	10-1914	
○		260	BLWN	"	"	"	"	
○		261	"	"	"	"	"	
○		267	"	"	"	"	8-1916	

6 CARS WITHOUT REAR TREADLE STEP
5 " WITH " " "
11 SINGLE END REMODELED TO ONE MAN CARS
5 " " LIGHT WEIGHT " " "
16 TOTAL ONE MAN CARS IN SUPERIOR
○ = 10 " TWO " " " "
26 PASS. CARS IN SUPERIOR

Year 1934

MECHANICAL DEP'T.

THE DULUTH STREET RAILWAY CO.
CAR EQUIPMENT
FOR THE
DULUTH DIVISION

FEB. 1, 1930

○ = DENOTES CARS THAT HAVE BEEN REMODELED TO ONE MAN
* = " " " WILL BE REMODELED TO ONE MAN-1930
⊘ = " " PURCHASED FOR ONE MAN OPERATION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCK	MOTOR	CONT.		IN SERVICE	
1/88	SUPPLY CAR	McGUIRE	SRG	^{2}K2		1895	
5/142	FLAT "	"	"	"		4-1917	
7/144	" "	"	"	"		7- "	
8/145	" "	"	"	"		" "	
5/147	SNOW PLOW	"	^{2}GE67	K10		9-1-17	PARK POINT
	ASH CAR					8-1923	TRAILER
	" "					"	"

5 SINGLE TRUCK WORK CARS
2 " " TRAILERS

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT		IN SERVICE	REMARKS
1/64	FLAT CAR	D.S.R.Co	^{4}GE67	K6	A1	1901	DOUBLE END
2/65	" "	"	" 70	"	"	1902	" "
3/96	" "	"	" "	K28	"	1907	" "
4/146 97	" "	"	" "	"	"	1912	" "
1/131 139	SNOW PLOW	BLD. #6	" 216	HH K35	"	1902	" "
3/140	" "	"	"	"	A4	1906	" "
4/146	" "	"	73E	C6K	CP21	11-1917	SINGLE END
1/67	WIRE CAR	BEMIS	67	K12	A1	1904	DOUBLE "
1/141	WRECKER	D.S.R.Co	70	K35JJ	CP21	1911	SINGLE "

9 DOUBLE TRUCK WORK CARS

SINGLE TRUCK PASSENGER CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
○		52	McGUIRE	GE67	K28		1892	DOUBLE END
○		57	"	"	"		"	" "
⊘	295		BRILL 78 M1	GE258 C	K63B	CP25C	10-1-19	SINGLE "
⊘	296		"	"	"	"	"	" "
⊘	297		"	"	"	"	"	" "
⊘	298		"	"	"	"	"	DOUBLE "
⊘	299		"	"	"	"	"	" "
⊘	300		"	"	"	"	"	" "

2 DINKEY TYPE CARS
6 BIRNEY " "

DOUBLE TRUCK PASSENGER CARS

FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
	151	BRILL	GE67	K28	AA1	6-1901	
	152	" 27F	"	K35JJ	"	"	
	153	"	"	"	"	"	
	154	"	"	"	"	"	
	155	"	"	K28	"	"	
	X156	"	"	"	"	"	
	X157	"	"	"	"	"	
	158	"	"	K35JJ	"	"	
	159	"	"	K28	"	"	
	X160	"	"	"	"	"	
	161	"	"	"	"	"	
	X162	"	"	"	"	"	

DEC. 1929 2 MOTORS REMOVED FROM EA. OF CARS MARKED X
THESE MOTORS WERE PLACED UNDER CARS 285-287-288

DOUBLE TRUCK PASSENGER CARS

	FAST	SLOW	TRUCK	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
○		170	BALDW.	GE70	K35JJ	CP21	4-1904	REMODELED 1928
○		171	"	"	"	"	"	"
○		172	"	"	"	"	"	"
○		173	"	"	"	"	"	"
○		174	"	"	"	"	"	"
○		175	"	"	"	"	"	"
○		176	"	"	"	"	"	"
○		178	"	"	"	"	3-1905	"
○		179	"	"	"	"	" "	"
○		180	"	"	"	"	7-1906	"
		183	BRILL	"	K28	AA1	6-1907	
		184	"	"	K35JJ	A1	" "	
		185	"	"	"	AA1	" "	
		186	BALDW.	"	"	A1	" "	
		188	"	"	"	AA1	" "	
		190	BRILL	"	"	"	7 "	
		191	"	"	"	"	" "	
		192	"	"	"	"	" "	
		193	"	"	"	"	8 "	
		194	"	"	"	"	" "	
		195	BALDW.	"	K43F2	"	" "	
		196	"	"	"	"	" "	
		197	"	"	K37C	"	" "	
*	203		"	GE213	" A	CP21	6-1908	
*	204		"	"	"	"	7-1909	
○	208		"	"	"	"	"	REMODELED 1929
○	210		"	"	"	"	"	" 1928
○	211		"	"	"	"	"	" "
○	212		"	"	"	CP27	"	" "
○	213		"	"	"	CP21	"	" "
○	215		"	"	"	"	6-1910	" "
○	216		"	"	"	"	"	" "
○	217		"	"	"	"	"	" "
○	218		"	"	"	"	"	" "
○	219		"	"	"	"	"	" "
⊘		220	INCLINE CABLE CAR			"	6-1911	2-GE210 MOTORS AT TOP
⊘		221	"	"	"	"	" "	
		222	BALDW.	GE70	K37C	CP27	" "	RE
○	223		T.C.R.T.6	GE216	"	"	" "	REMODELED 1929
○	224		"	"	"	"	" "	" "
○	225		"	"	"	"	" "	" "
○	226		"	"	"	"	" "	" "
○	227		"	"	"	"	" "	" "
○	228		"	"	" A	"	" "	" "
○	229		"	"	" C	"	" "	" "
○	230		"	"	"	"	" "	" "
○	231		"	"	"	"	" "	" "
○	232		"	"	"	"	" "	" "
	233		" #9	GE200	"	"	" "	
○	234		"	GE216	"	"	" "	" "
	235		" #9	GE200	"	"	" "	
○	236		"	GE216	"	"	" "	
○	237		"	"	"	"	" "	" "
○	238		"	"	" A	"	" "	" "
○	239		"	"	"	A1	" "	" "
*	240		"	"	"	CP21	" "	
○	241		"	"	"	A1	" "	" "
○	242		"	"	" C	CP27	6-1912	" "
○	243		"	"	"	"	" "	" "
○	244		"	"	"	"	" "	" 1928
○	245		"	"	"	"	" "	" 1929

DOUBLE TRUCK PASSENGER CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
○	246		T.C.R.T.Co	GE216	K37C	CP27	8-1912	REMODELED 1929
○	247		"	"	"	"	" "	" "
○	248		"	"	"	"	" "	" "
○	249		"	"	"	"	" "	" "
○	250		"	"	"	"	" "	" "
○	251		"	"	"	"	" "	" "
○	252		"	"	"	"	10 "	" "
○	253		"	"	"	"	" "	" "
○	254		"	"	"	"	" "	" "
⊘		255	BRILL	GE67	K6	AA1	1-1913	HIGHLAND D.E.
⊘		256	"	"	"	"	" "	" "
	257		T.C.R.T.#9	GE200	K43F2	CP25	10-1914	
	258		"	"	"	"	" "	
	259		"	"	"	"	" "	
	260		"	"	"	"	" "	
	261		"	"	"	"	" "	
	262		"	"	"	"	" "	
○	265		" #6	GE216	"	"	5-1916	REMODELED 1929
*	266		"	"	"	"	" "	
	267		" #9	GE200	"	"	8- "	
○	268		"	"	"	"	" "	REMODELED 1929
	269		"	"	"	"	" "	FRONT EXIT
	270		"	"	"	"	" "	" "
	271		"	"	"	"	6-1917	" "
	272		"	"	"	"	" "	" "
	273		"	"	"	"	5 "	" "
	274		"	"	"	"	" "	" "
	275		"	"	"	"	" "	
	276		"	"	"	"	" "	FRONT EXIT
	277		"	"	"	"	" "	" "
	278		"	"	"	"	" "	" "
○		285	ST.LOUIS	GE67	K35JJ	AA1	9-1-17	DOUBLE END
○		286	"	"	"	"	"	" "
○		287	BRILL 27G1	"	"	A4	"	" "
○		288	"	"	"	"		" "
	289		T.C.R.T.#9	GE200	K43F2	CP21	11-20-18	
	290		"	"	"	"	"	
	291		"	"	"	"	"	
	292		"	"	"	"	"	
	293		"	"	"	"	"	
	294		"	"	"	"	"	

8 SINGLE TRUCK ONE MAN CARS
2 INCLINE " " "
56 DOUBLE TRUCK " " "
○ = 66 ONE MAN CARS
52 SERVICEABLE TWO MAN CARS
4 UNSERVICEABLE " " "
122 PASSENGER CARS

8 - K35JJ CONTROLLERS ON CARS 285 TO 288
WERE TAKEN FROM THE 150 GROUP OF CARS

EXTRA EQUIPMENT

1-SET #9 T.C.R.T.Co. TRUCKS EQUIPPED WITH 4 GE200 MOTORS
1- " #6 " " " " " GE216 "
1- " BALDWIN " " " " GE 70 "
1 " BRILL " " " 3 GE 67 "
1 " " " " " 4 GE 70 "

No. 1836

THE DULUTH STREET RAILWAY CO.
CAR EQUIPMENT
FOR THE
SUPERIOR DIVISION

MECH. DEP'T. FEB. 1 - 193

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
131	SUPPLY CAR	McGUIRE	SRG30	K2			DOUBLE END
6/143	FLAT "	"	"	"		7-1917	SINGLE "
	TRAILER					8-1923	

2 SINGLE TRUCK WORK CARS
1 " " " " TRAILER

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
2/66	SNOW PLOW	BALD.	GE216	K35HH	A1	1903	DOUBLE END

1 DOUBLE TRUCK WORK CAR

PASSENGER CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
○		163	BRILL	GE70	K35JJ	CP27	4-1904	REMODELED 192
○		164	"	"	"	CP21	" "	"
○		165	"	"	"	"	" "	"
○		166	"	"	"	"	" "	"
○		167	"	"	"	"	" "	"
○		168	"	"	"	"	" "	"
○		177	"	"	"	"	" "	"
		181	BALD.	"	K28	A1	7-1906	
		182	"	"	"	"	" "	
		187	"	"	K35JJ	CP21	" "	
		189	"	"	K28	AA1	7-1907	
*	198		"	GE213	K37 A	CP21	6-1908	
*	199		"	"	"	"	" "	
*	200		"	"	"	"	" "	
*	201		"	"	"	"	" "	
*	202		"	"	"	"	" "	
*	205		"	"	"	"	7-1909	
*	206		"	"	"	"	" "	
*	207		"	"	"	"	" "	
*	209		"	"	"	"	" "	
*	214		"	"	"	"	" "	
*	263		"	"	K43F2	CP25	5-1916	
⊘	301		SMITH 12	GE258K	K28	CP25C6	4-19-25	
⊘	302		"	"	"	"	"	
⊘	303		"	"	"	"	"	
⊘	304		"	"	"	"	"	
⊘	305		"	"	"	"	"	

○ = 12 ONE MAN CARS
15 TWO " "
27 DOUBLE TRUCK PASSENGER CARS

1- SMITH #12 TRUCK & 2 GE 258 K MOTORS
2 " ARMATU

No. 1837

Mech. Dept. 10-4-32

THE DULUTH STREET RAILWAY Co.
CAR EQUIPMENT
FOR THE
DULUTH DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
1/88	SUPPLY CAR	McGUIRE	GE.67	K10		1895	DOUBLE END
5/142	FLAT [illegible]	"	SRG.30	K2		4-1917	SINGLE "
7/144	" Coal	"	GE67	K10		7- "	" "
8/145	" Ashes	"	SRG30	K2		" "	" "
	ASH CAR	"				8-1923	TRAILER
	"	"				" "	"

4 SINGLE TRUCK WORK CARS
2 " " " " TRAILERS

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR	IN SERVICE	REMARKS
1/64	FLAT CAR	D.S.R	GE.67	K6	A1	1901	DOUBLE END
2/65	" "	"	70	"	"	1902	"
3/96	" "	"	"	28	"	1907	"
4/97	" "	"	"	"	"	1912	"
1/139	SNOW PLOW	BLWN #6	216	K35 JJ	"	1902	"
3/140	" "	"	"	"	A4	1906	"
4/146	" "	" 03	73E	C6K	CP21	11-1917	SINGLE END
1/67	WIRE CAR	D.S.R	67	K6	A1	1904	DOUBLE "
1/191	WRECKER	"	70	K35 JJ	CP21	1911	SINGLE "

9 DOUBLE TRUCK WORK CARS

SINGLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP	IN SERVICE	REMARKS
X	295		BRILL 78	258 C	K63 B	CP25 C2	10-1-19	SINGLE END
X	296		"	"	"	"	"	"
X	297		"	"	"	"	"	"
X	298		"	"	"	"	"	DOUBLE END
X	299		"	"	"	"	"	"
X	300		"	"	"	"	"	"

6 BIRNEY TYPE CARS

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
X	170		T.C. #9	GE 200	K35JJ	CP21	4-1904	SIMPLEX SAFETY
X	172		"	"	"	"	"	"
X	174		"	"	"	"	"	"
X	175		"	"	"	"	"	"
X	178		"	"	"	"	3-1905	"
X	179		"	"	"	"	"	"
X	180		"	"	"	"	7-1906	"
Ø		181	BLWN.	GE 70	K28	A1	"	
Ø		182	"	"	"	"	"	
Ø		183	BRILL	"	"	AA1	6-1907	
Ø		190	"	"	K35JJ	"	7- "	
Ø		191	"	"	"	"	"	
Ø		192	"	"	"	"	"	
Ø		193	"	"	"	"	8- "	
Ø		194	"	"	"	"	"	
Ø		195	BLWN.	"	K43F2	"	"	

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
Ø		196	BLWN.	GE 70	K43F2	AA1	8-1907	
Ø		197	"	"	K37C	"	"	
X	198		"	GE 213	K37	CP21	6-1908	G.E. SAFETY
X	199		"	"	"	"	"	"
X	200		"	"	"	"	"	"
X	201		"	"	"	"	"	"
X	202		"	"	"	"	"	"
X	203		"	"	"	"	"	"
X	204		"	"	"	"	7-1909	"
X	205		"	"	"	"	"	"
X	206		"	"	"	"	"	"
X	207		"	"	"	"	"	"
X	208		"	"	"	"	"	"
X	209		"	"	"	"	"	"
X	210		"	"	"	"	"	SIMPLEX SAFETY
X	211		"	"	"	"	"	"
X	212		"	"	"	CP27	"	"
X	213		"	"	"	CP21	"	"
X	214		"	"	"	"	"	GE SAFETY
X	215		"	"	"	"	6-1910	SIMPLEX SAFETY
X	216		"	"	"	"	"	"
X	217		"	"	"	"	"	"
X	218		"	"	"	"	"	"
X	219		"	"	"	"	"	"
X		220	INCLINE CAR			"	6-1911	
X		221	"	"		"	"	
Ø		222	BLWN.	GE 70	K37C	CP27	"	
X	223		T.C.R.T. #6	GE. 216	"	"	"	GE. SAFETY
X	224		"	"	"	"	"	"
X	225		"	"	"	"	"	"
X	226		"	"	"	"	"	"
X	227		"	"	"	"	"	"
X	228		"	"	" A	"	"	"
X	229		"	"	" C	"	"	"
X	230		"	"	"	"	"	"
X	231		"	"	"	"	"	"
X	232		"	"	"	"	"	"
Ø		233	BRILL	GE 70	"	"	"	
X	234		T.C.R.T. #6	" 216	"	"	"	GE SAFETY
Ø	235		" #9	" 200	"	"	"	
X	236		" #6	" 216	"	"	"	G.E. SAFETY
X	237		"	"	"	"	"	"
X	238		"	"	" A	"	"	"
X	239		"	"	"	A1	"	"
X	240		"	"	"	CP21	"	"
X	241		"	"	"	A1	"	"
X	242		"	"	" C	CP27	6-1912	"
X	243		"	"	"	"	"	"
X	244		"	"	"	"	"	SIMPLEX SAFETY
X	245		"	"	"	"	"	GE. SAFETY
X	246		"	"	"	"	8 "	"
X	247		"	"	"	"	"	"
X	248		"	"	"	"	"	"
X	249		"	"	"	"	"	"
X	250		"	"	"	"	"	"
X	251		"	"	"	"	"	"
X	252		"	"	"	"	10 "	"
X	253		"	"	"	"	"	"
X	254		"	"	"	"	"	"
X		255	BRILL	67	K6	AA1	1-1913	HIGHLAND SIMPLEX SAFETY
X		256	"	"	"	"	"	"

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
Ø X		257	BRILL	GE 70	K43F2	CP25	10-1914	
Ø X		258	"	"	"	"	"	
Ø		259	"	"	"	"	"	
Ø		260	BLWN	"	"	"	"	
Ø		261	"	"	"	"	"	
Ø		262	BRILL	"	"	"	"	
⊙ X	263		T.C. #9	GE 200	"	"	5-1916	
X	265		T.C.R.T. #6	GE 216	"	"	"	G.E. SAFETY
X	266		"	"	"	"	"	"
Ø X		267	BLWN.	GE 70	"	"	8 "	
X	268		T.C. #9	GE 200	"	"	"	G.E. SAFETY
Ø		269	BLWN	GE 70	"	"	"	FRONT EXIT
Ø		270	"	"	"	"	"	"
Ø		271	"	"	"	"	6-1917	"
Ø		272	"	"	"	"	"	"
Ø		273	"	"	"	"	8- "	"
Ø		274	"	"	"	"	"	"
Ø		275	BRILL	"	"	"	"	
Ø		276	BLWN.	"	"	"	"	FRONT EXIT
Ø		277	BRILL	"	"	"	"	"
Ø		278	BLWN.	"	"	"	"	"
Ø X	289		T.C. #9	GE 200	"	CP21	11-20-18	
⊙ X	290		"	"	"	"	"	
⊙ X	291		"	"	"	"	"	
Ø X	292		"	"	"	"	"	
⊙ X	293		"	"	"	"	"	
⊙ X	294		"	"	"	"	"	

3 SINGLE END BIRNEY TYPE ONE MAN CARS
3 DOUBLE " " " " " "
2 INCLINE " " " "
2 DOUBLE END ON HIGHLAND " " "
62 SINGLE END REMODELED TO " " "
72 TOTAL ONE MAN PASS. CARS IN DULUTH
6 SERVICEABLE 2 " " " " "
78 " CARS
32 UNSERVICEABLE 2 MAN CARS IN DULUTH
110 CARS

⊙ DENOTES TWO MAN CARS
Ø UNSERVICEABLE

EXTRA EQUIPMENT

1- SET T.C.R.T #6 TRUCKS EQPD. WITH 4 GE 213 MOTORS
" " " " " " 216 "
" " #9 " " " " 200 "
" BLWN. " " " " 70

Year 1932

Mech. Dept. 10-4-32

THE DULUTH STREET RAILWAY Co.
CAR EQUIPMENT
FOR THE
SUPERIOR DIVISION

SINGLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.		IN SERVICE	REMARKS
6/143	FLAT	McGUIRE	SRG30	K2		7-1917	SINGLE END
	ASH CAR	"				8-1923	TRAILER

1- SINGLE TRUCK WORK CAR
1- " " " " TRAILER

DOUBLE TRUCK WORK CARS

CAR No.	KIND OF CAR	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
2/66	SNOW PLOW	BLWN.	GE 216	K35 HH	A1	1903	

1- DOUBLE TRUCK WORK CAR

DOUBLE TRUCK PASS. CARS

	FAST	SLOW	TRUCKS	MOTORS	CONT.	AIR COMP.	IN SERVICE	REMARKS
X	163		T.C. #9	GE 200	K35JJ	CP27	4-1904	FRONT EXIT ONLY
X	164		"	"	"	CP21	"	"
X	165		"	"	"	"	"	"
X	166		"	"	"	"	"	"
X	167		"	"	"	"	"	"
X	168		"	"	"	"	"	"
X	177		"	"	"	"	"	"
X	171		"	"	"	"	"	SIMPLEX SAFETY
X	173		"	"	"	"	"	
X	176		"	"	"	"	"	
Ø		184	BRILL	GE 70	"	A1	6-1907	
Ø		185	"	"	"	AA1	"	
Ø		186	BLWN.	"	"	A1	"	
Ø X		187	"	"	"	CP21	"	
Ø		188	"	"	"	AA1	"	
⊙ X		189	"	"	"	"	7- "	
X	301		SMITH #12	GE 258 K	K28	CP25C6	4-19-25	SIMPLEX SAFETY
X	302		"	"	"	"	"	"
X	303		"	"	"	"	"	"
X	304		"	"	"	"	"	"
X	305		"	"	"	"	"	"

10 SINGLE END REMODELED TO ONE MAN CARS
5 " " LIGHT WEIGHT " " "
15 TOTAL ONE MAN PASS. CARS IN SUPERIOR
1 SERVICEABLE 2 MAN " " "
16 " CARS
5 UNSERVICEABLE "
21 CARS

⊙ DENOTES TWO MAN CARS
Ø UNSERVICEABLE " " "

1- SMITH #12 TRUCK & 2 GE 258 K MOTORS
2 " ARMATURES

Year 1932

CARBUILDING COSTS

National® Brand 45-606 Eye-Ease® 45-306 2 - Pack Made in USA

Duluth St. Ry.
Duluth Division Original Cost per Car
1-1-26 A. L. Drum & Co.

	Initials	Date
Prepared By		
Approved By		

Car No's	Specifications as of 7-1921	1	2 Body	3 Trucks	4 Air Brake Equipment	5 Electrical Equipment	6 Total
151 - 162	Brill01/67/K6/AA1		2983 50	688 50	314 42	2244 —	6230 42
189 - 197	BLW1/70/K28B/CP21		3354 78	816 —	299 12	2244 —	6713 90
198 - 203	TC5/213/K37A/CP21		3280 32	856 80	299 11	2356 20	6792 43
204 - 214	TC5/213/K37A/CP21		3282 36	928 20	299 11	2356 20	6865 87
215	TC6/213/K37A/CP21		3282 36	918 —	299 12	2356 20	6855 68
222	TC8/67/K37/CP21						
223-240	TC8/216/K37/CP21		3282 36	887 40	299 12	2343 71	6812 59
241	TC8/70/K37/CP21						
242 - 254	TC8/216/K37/CP27		3282 36	887 40	273 62	2356 20	6799 58
255 - 256	TC8/67/2K6/AA1 (ai)		2850 90	826 20	324 62	2428 62	6430 34
257-262 267-278	TC9/200/K43F2/CP25		3282 36	846 60	248 12	2152 20	6529 28
265 266	TC5/216/K43F2/CP25 TC5/70/K43F2/CP25	265 TC6 or TC9	3282 36	928 20	248 12	2300 10	6758 78
285 - 286	SL47/26E67/2K10/AA1		2652 —	714 —	324 62	1218 90	4909 52
287 - 288	B27G1/26E67/2K10/AA4		2652 —	749 70	285 86	1218 90	4906 46
289 - 294	TC9/200/K43F2/CP21		3354 78	846 60	299 12	2152 20	6652 70
295 - 297	B78M1/26E258C/K63B/CP25C2		1275 —	255 —	239 70	1122 —	2891 70
298 - 300	B78M1/26E258C/2K63B/CP25C2		1275 —	255 —	252 96	1428 —	3210 96
52 & 57	McG/2SR630/2K2/Hand		1632 —	204 —	—	1183 20	3019 20
220-221	TC Special/none/none/CP21		"See" Account 530J"				

National® Brand 45-606 Eye-Ease®
45-306 2 - Pack
Made in USA

Duluth St. Ry.
Superior Division Original Cost per Car
1-1-27 A. L. Drum & Co.

	Initials	Date
Prepared By		
Approved By		

Car No's.	Specifications	1	2 Body	3 Trucks	4 Air Brake Equipment	5 Electrical Equipment	6 Total
163 -166	B04/70/K35JJ/ CP27 CP21	163 164-66	3380 –	750 –	293 –	2244 –	6667 –
167 -169	B04/70/K35JJ/CP21		3380 –	750 –	299 –	2244 –	6673 –
175 -176	B04/70/K28B/AA1		3380 –	750 –	314 –	2244 –	6688 –
178 -179	B04/70/K28B/AA2		3080 –	750 –	314 –	2244 –	6388 –
180, 182	BLW/70/K28B/ AA2 AA1	180 182	3080 –	877 –	314 –	2244 –	6515 –
185	BLW/70/K35JJ/AA1		3450 –	877 –	314 –	2244 –	6885 –
186 -188	BLW/70/K35JJ/CP21		3450 –	877 –	299 –	2244 –	6870 –
202	BLW/213/K37A/CP25C6	These duplicate Duluth Div 1-1-26	3380 –	877 –	248 –	2356 –	6861 –
209	} } } }						
211-212	} } } }						
216 -219	BLW/213/K37A/CP21		3380 –	877 –	299 –	2356 –	6912 –
263	BLW/213/K43F2/CP25		3380 –	877 –	248 –	2356 –	6861 –
301 -305	TC12/258K/Reb. K28/CP25C6		6514 –	1630 –	618 –	2977 –	11739 –

NOTE: NOT included in either Division are: 170-174, 177, 181, and 183-184; apparently due to a change in Division assignment between 1-1-26 and 1-1-27.

Spare Equipment

		Trucks	Air Brake Equipment
1	Smith #12 Truck	81476	
2	axles for #12 Truck	19206 each	
1	AA-2 air Compressor		19380

National® Brand 45-606 45-306 Eye-Ease® 2 - Pack Made in USA

Duluth St. Ry.

Service Equipment - Cost to Reproduce New

as of 1915

	Initials	Date
Prepared By		
Approved By		

Car No.	Description Mech/Elect Equip.	1	2 Body	3 Trucks	4 Electrical Equipment	5 Air Brake Equipment	6 Total
1/141	Crane Car 37-2 8-Ton Crane with three 7½ HP motors. Steel UF. TCRTCo Builder						
	DSR/4GE70/1 K-28-B/GE CP-21		5995 —	873 —	2200 —	293 25	9361 25
1/139 3/140	Snow Plow 41-10 with 4-9 x 12-2 3/8 steel plow each end; and 3'0 x 13-6 side wings air operated. Wood UF and body. DSR Builder						
	BLW/4GE216/2 K-28-A/Christensen AA (DE)		3565 —	800 —	2625 —	280 25	7270 25 each
4/146	Snow Plow 36-8 with one plow 4-9 x 12-6 3/8" steel; and one motor operated side wing 3-3 x 12-0 3/8" steel. Steel UF, wood body. TCRTCo Builder						
	TC9 (sic)/4GE73/C-6/CP-21		3000 —	830 —	4675 —	293 25	8798 25
1/67	Line Car 30-4 with 5-6 x 48" (sic) "71" Cab; hand-operated swivel tower and reelstand. Wood UF and body. DSR Builder						
	DSR/4GE67/2 K-12/Christensen AA 1 (DE)		1135 —	813 —	2381 —	318 25	4647 25
1/64; 2/65; 4-97	Work Car (Dbl End) with 4-6 x 4-6 Cab each end, 22" drop sides; equipped with 2 I-beam swing derricks and two 1-ton electric chain hoists. Steel UF. DSR Builder						
	DSR/4GE67/2 K-6/Christensen AA-1 (DE)		1570 —	813 —	2481 —	318 25	5182 25 each
3/96	Work Car - same description as the three previous work cars						
	DSR/4GE67/2 K-6/Christensen AA-1 (DE)		2409 —	813 —	2481 —	318 25	6021 25
5/147	Snow Plow: Sgl Trk Passenger Car 32-9 reinforced with steel shear plows each end. Wood frame and body. LaClede Car Co. builder						
	McGuire/2 T-H WP30/2 K-2		1800 —	200 —	1160 —	Hand	3160 —
3/148	Tower Car: Sgl Trk Passenger Car with fixed tower built on roof. Wood frame and body. LaClede Car Co. builder (sic)						
	McGuire/2 T-H WP30/2 K-2		1550 —	200 —	1160 —	Hand	2910 —
1/88	Sgl Trk Closed Body Supply Car 20-5. Wood frame and body. DSR Builder.						
	McGuire/2 T-H SRG30/2 K-2		1000 —	200 —	1160 —	Hand	2360 —
5/142; 7/144; 8/145	Sgl Trk Flat Car 21-0 with drop side boards, cab. Wood const.						
	McGuire/2 T-H SRG30/2 K-2		500 —	200 —	1160 —	Hand	1860 — each
2 cars	no numbers: Sgl Trk Flat Car 15-3, trailer, wood const.						
	Dennis		150 —	225 —	—0—	Hand	375 — each

National®Brand 45-606 Eye-Ease® 45-306 2 - Pack Made in USA

Duluth St. Ry.

Superior Div Service Equipment Original Cost per Car

1-1-27 A. L. Drum & Co.

	Initials	Date
Prepared By		
Approved By		

Car No	Specifications	Body	Trucks	Air Brake Equipment	Electrical Equipment	Total
131	Supply Car Sgl. Trk					
	McGuire/2 SRG 30/2 K-2	1122 –	204 –	Hand	1183 –	2509 –
2/66	Snow Plow 41-10 with A-9 x 12-2 Plow 3/8" steel at each end. Side wings 3-0 x 13-6 operated by compressed air. Equipped with pneumatic lifts for nose wings 1923					
	BLW/46E216/2 K35HH/ Christensen AA-1	3899 –	877 –	314 –	2781 –	7871 –
6/143	Flat Car Sgl-Trk 21-0 with Cab + swivel crane and chain block.					
	McGuire/2 SRG 30/one K-2	510 –	204 –	Hand	1014 –	1728 –
Three	Sgl Trk steel body Trailers converted from passenger cars 47 and 79 and Wire Car 51					
	McGuire	510 –	204 –	–	–	714 – each

Duluth Division

Account 530 A Car Bodies
Account 530 B Trucks under cars
Account 530 C Air Brake Equipment Under Cars
Account 530 D Johnson Fare Boxes
Account 530 E Coasting Recorders
Account 530 F Turnstiles

1921

Drum 1-1-26 ?

dy pecifi- ation nber	Car Numbers Inclusive From	To	Number of Cars	530-A Car Bodies	530-B Trucks	530-C Air Brake Equipment	530-D Johnson Fare Boxes	530-E Coasting Recorders	530-F Turnstiles	Total	533-A Electrical Equipment	Grand Total
1	151	162	12	$35,802.00	$ 8,262.00	$ 3,772.98	$	$ 1,325.64	$	$49,162.62	$ 26,928.00	$ 76,090.62
2	189	197	9	30,193.02	7,344.00	2,692.04	756.88	994.23	1,751.12	43,731.29	20,196.00	63,927.29
3	198	203	6	19,681.92	5,140.80	1,794.68		662.82		27,280.22	14,137.20	41,417.42
4	204	214	11	36,105.96	10,210.20	3,290.26		1,215.17		50,821.59	25,918.20	76,739.79
4	215		1	3,282.36	918.00	299.12		110.47		4,609.95	2,356.20	6,966.15
4	222	241	20	65,647.20	17,748.00	5,982.30		2,209.40		91,586.90	46,874.10	138,461.00
4	242	254	13	42,670.68	11,536.20	3,557.00		1,436.11		59,199.99	30,630.60	89,830.59
5	255	256	2	5,701.80	1,652.40	649.23				8,003.43	4,857.24	12,860.67
4	257 to 262;	(267 to 278)	18	59,082.48	15,238.80	4,466.07	94.61	1,988.46	218.89	81,089.31	38,739.60	119,828.91
4	265	266	2	6,564.72	1,856.40	496.23		220.94		9,138.29	4,600.20	13,738.49
6	285	286	2	5,304.00	1,428.00	649.23	189.22			7,570.45	2,437.80	10,008.25
7	287	288	2	5,304.00	1,499.40	571.71	189.22			7,564.33	2,437.80	10,002.13
2	289	294	6	20,128.68	5,079.60	1,794.69		662.82		27,665.79	12,913.20	40,578.99
8	295	297	3	3,825.00	765.00	719.10	283.83			5,592.93	3,366.00	8,958.93
8	298	300	3	3,825.00	765.00	758.88	283.83			5,632.71	4,284.00	9,916.71
9	52 & 57		2	3,264.00	408.00					3,672.00	2,366.40	6,038.40
NCLINE y. 10)	220	221	(See Account 530 J)									
OTAL			112	$346,382.82	$89,851.80	$31,493.52	$ 1,797.59	$10,826.06	$ 1,970.01	$482,321.80	$ 243,042.54	$ 725,364.34

DULUTH DIVISION

ROLLING STOCK

BRIEF SPECIFICATION OF PASSENGER CARS ASSIGNED TO DULUTH DIVISION AS OF JULY, 1921.

Group No.	No. of Cars	Car Numbers inclusive		Body				Trucks	Motor Equipment				Brake Equipment	
		From	To	Type	Length	Builder	Date in service	Maker	Motors No.	Motors Maker	Controllers No.	Controllers Make	Single or Double end	Maker
1	12	151 to	162	D.T.	43' 2-1/8"	T.C.R.T.Co.	1901	Brill #27	4	G.E.-67	1	G.E.K.-6	S. E.	Christensen AA1
4	9	189 "	197	"	46' 9-1/8"	do	1907	Baldwin #1	4	G.E.-70	1	G.E.K.-28-B	S. E.	G.E.C.P.-21
5	6	198 "	203	"	46' 7-1/8"	do	1908	T.C.R.T. #5	4	G.E.-213	1	G.E.K.-37A	S. E.	G.E.C.P.-21
6	11	204 "	214	"	46' 8"	do	1909	do #5	4	G.E.-213	1	G.E.K.-37A	S. E.	G.E.C.P.-21
7	1		215	"	46' 8"	do	1910	do #6	4	G.E.-213	1	G.E.K.-37A	S. E.	G.E.C.P.-21
9	1		222	"	46' 8"	do	1911	do #8	4	G.E.-67	1	G.E.K.-37	S. E.	G.E.C.P.-21
9	18	223 "	240	"	46' 8"	do	1911	do #8	4	G.E.-216	1	G.E.K.-37	S. E.	G.E.C.P.-21
9	1		241	"	46' 8"	do	1911	do #8	4	G.E.-70	1	G.E.K.-37	S. E.	G.E.C.P.-21
10	13	242 "	254	"	46' 8"	do	1912	do #8	4	G.E.-216	1	G.E.K.-37	S. E.	G.E.C.P.-27
11	2	255 &	256	"	37' 7"	do	1913	do #8	4	G.E.-67	2	G.E.K.-6	D. E.	Christensen AA1
12	6	257 "	262	"	46' 8"	do	1914	do #9	4	G.E.-200	1	G.E.K.-43-F2	S. E.	G.E.C.P.-25
12	4	267 "	270	"	46' 8"	do	1916	do #9	4	G.E.-200	1	G.E.K.-43-F2	S. E.	G.E.C.P.-25
12	8	271 "	278	"	46' 8"	do	1917	do #9	4	G.E.-200	1	G.E.K.-43-F2	S. E.	G.E.C.P.-25
13	1		265	"	46' 8"	do	1916	do #5	4	G.E.-216	1	G.E.K.-43-F2	S. E.	G.E.C.P.-25
13	1		266	"	46' 8"	do	1916	do #5	4	G.E.-70	1	G.E.K.-43-F2	S. E.	G.E.C.P.-25
16	2	285 &	286	"	40' 5"	St. Louis Car	1917	St. Louis	2	G.E.-67	2	G.E.K.-10	D. E.	National AA1
17	2	287 "	288	"	41' 1"	Danville	1917	Brill 27-G-1	2	G.E.-67	2	G.E.K.-10	D. E.	National AA4
18	6	289 "	294	"	46' 9-5/8"	T.C.R.T.Co.	1918	T.C.R.T. #9	4	G.E.-200	1	G.E.K.-43-F2	S. E.	G.E.C.P.-21
	104	Total Double Truck Cars												
19	3	295 to	297	S.T.	26' 9-1/2"	Amer. Car Co.	1919	Brill 78-M-1	2	G.E.-258c	1	G.E.K.-63B	S. E.	G.E.C.P.-25-C2
20	3	298 "	300	"	26' 9-1/2"	do	1919	" 78-M-1	2	G.E.-258c	2	G.E.K.-63-B	D. E.	G.E.C.P.-25-C2
21	2	52 &	57	"	32' 0"	Laclede Car Co.	1919 1892	McGuire	2	S.R.G.-30	2	K-2	D. E.	Hand
	8	Total Single Truck Cars												
8	2	220 & 221		S.T.	24' 0"	T.C.R.T.Co.	1911	T.C. Special	None		None		S. E.	G.E.C.P.-21
	114	Total Passenger Cars.												

SUPERIOR DIVISION

PASSENGER AND COMBINATION CARS

1921

Drum 1-1-27 ?

Account 530 A - Car Bodies
Account 530 B - Trucks
Account 530 C - Air Brake Equipment
Account 533 A - Electrical Equipment

r Numbers rom	Incl. To	Number of Cars	Acct. 530A Car Bodies	Acct. 530B Trucks	Acct. 530C Air Brake Equipment	Acct. 530D Fare Boxes	Acct. 530E Coasting Recorders	Total	Acct. 533A Electrical Equipment	Total
163	166	4	$ 13,520.00	$ 3,000.00	$ 1,172.00	$ 325.52	$ -	$ 18,017.52	$ 8,976.00	$ 26,993.52
167	169	3	10,140.00	2,250.00	897.00	244.14	110.47	13,641.61	6,732.00	20,373.61
175	176	2	6,760.00	1,500.00	628.00	189.22	220.94	9,298.16	4,488.00	13,786.16
178	179	2	6,160.00	1,500.00	628.00	175.99	220.94	8,684.93	4,488.00	13,172.93
180		1	3,080.00	877.00	314.00	94.61	110.47	4,476.08	2,244.00	6,720.08
182		1	3,080.00	877.00	314.00	94.61	110.47	4,476.08	2,244.00	6,720.08
185		1	3,450.00	877.00	314.00	94.61	110.47	4,846.08	2,244.00	7,090.08
186	188	3	10,350.00	2,631.00	897.00	244.14	331.41	14,453.55	6,732.00	21,185.55
202		1	3,380.00	877.00	248.00	94.61	110.47	4,710.08	2,356.00	7,066.08
209		1	3,380.00	877.00	248.00	94.61	110.47	4,710.08	2,356.00	7,066.08
211	212	2	6,760.00	1,754.00	496.00	189.22	220.94	9,420.16	4,712.00	14,132.16
216	219	4	13,520.00	3,508.00	1,196.00	378.44	441.88	19,044.32	9,424.00	28,468.32
263		1	3,380.00	877.00	248.00	94.61	110.47	4,710.08	2,356.00 ✓	7,066.08
Total		26	$ 86,960.00	$ 21,405.00	$ 7,600.00	$ 2,314.33	$ 2,209.40	$120,488.73	$ 59,352.00	$ 179,840.73
301	305	5	32,570.00	8,150.00	3,090.00			43,810.00	14,885.00	58,695.00

as of 1926 approx.

1921

SUPERIOR DIVISION

Condensed Specification of Passenger Car Bodies, Trucks, Air Brake, and Motor Equipments.

Car Numbers		Numbers of Cars	BODY			TRUCKS	Air Brake Equipment	MOTOR EQUIPMENT			
From	To		Builder	Type	Length			Motors No.	Motors Type	Controllers No.	Controllers Type
163		1	T.C.R.T.Co.	D.T. closed	45' 2-1/8"	Brill	C.P.27	4-G.E.70			K-35JJ
164	169	6	"	"	45' 2-1/8"	"	C.P.21	4-G.E.70			K-35JJ
175	176	2	"	"	45' 2-1/8"	"	A.A. 1	4-G.E.70			K-28B
178	179	2	"	"	45' 2-1/8"	"	A.A. 2	4-G.E.70			K-28B
180		1	"	"	45' 2-1/8"	Baldwin	A.A. 2	4-G.E.70			K-28B
182		1	"	"	45' 2-1/8"	"	A. 1	4-G.E.70			K-28B
185		1	"	"	46' 9-5/8"	"	A.A. 1	4-G.E.70			K-35JJ
186	188	3	"	"	46' 9-5/8"	"	C.P.21	4-G.E.70			K-35JJ
202		1	"	"	46' 7-1/8"	"	C.P.25C6	4-G.E.213			K-37A
209		1	"	"	46' 8"	"	C.P.25C6	4-G.E.213			K-37A
211	212	2	"	"	46' 8"	"	C.P.25C6	4-G.E.213			K-37A
216	219	4	"	"	46' 8"	"	C.P. 21	4-G.E.213			K-37A
263		1	"	"	46' 8"	"	C.P. 25	4-G.E.213			K-43F2
301	305	5	"	"		Smith #12	C.P.25C6	4-G.E.258K			K-28